

**IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF WEST VIRGINIA
CHARLESTON DIVISION**

B.P.J., by her next friend and mother,
HEATHER JACKSON,

Plaintiff,

v.

**WEST VIRGINIA STATE BOARD OF
EDUCATION, HARRISON COUNTY BOARD
OF EDUCATION, et al.,**

Defendants,

and

LAINY ARMISTEAD,

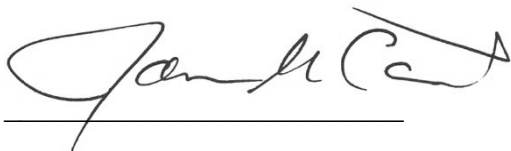
Defendant-Intervenor.

Civil Action No: 2:21-cv-00316

**THE HONORABLE
JOSEPH R. GOODWIN**

DECLARATION OF JAMES M. CANTOR, PhD.

I, Dr. James Cantor, pursuant to 28 U.S. Code § 1746, declare under penalty of perjury under the laws of the United States of America that the facts contained in my Expert Report of James M. Cantor, Ph.D., in the Case of *B.P.J. v. West Virginia State Board of Education*, dated February 23, 2022, attached hereto, are true and correct to the best of my knowledge and belief, and that the opinions expressed therein represent my own expert opinions.



Dr. James M. Cantor, PhD.

Executed February 23, 2022

Expert Report of

James M. Cantor, PhD.

In the case of *B.P.J. vs. West Virginia State Board of Education*.

February 23, 2022

Table of Contents

I.	Background & Credentials	1
II.	Introduction.....	3
III.	Clarifying Terms	4
IV.	Evidence Cited by Plaintiffs’ Expert Reports	5
V.	Evidence Missing from Plaintiffs’ Expert Reports	11
	A. Adult-Onset Gender Dysphoria	12
	1. Outcome Studies of Transition in Adult-Onset Gender Dysphoria	13
	2. Mental Health Issues in Adult-Onset Gender Dysphoria	13
	B. Childhood Onset (Pre-Puberty) Gender Dysphoria.....	15
	1. Prospective Studies of Childhood-Onset Gender Dysphoria Show that Most Children Desist in the “Natural Course” by Puberty	15
	2. “Watchful Waiting” and “The Dutch Approach”	18
	3. Studies of Transition Outcomes: Overview	20
	a. Outcomes of The Dutch Approach (studies from before 2017): Mix of positive, negative, and neutral outcomes	21
	b. Clinicians and advocates have invoked the Dutch Approach while departing from its protocols in important ways.	23
	c. Studies by other clinicians in other countries have failed to reliably replicate the positive components of the results reported by the Dutch clinicians in de Vries et al. 2011.	24
	4. Mental Health Issues in Childhood-Onset Gender Dysphoria.....	26
	C. Adolescent-Onset Gender Dysphoria	28
	1. Features of Adolescent-Onset Gender Dysphoria	28
	2. Prospective Studies of Social Transition and Puberty Blockers in Adolescence.....	29
	3. Mental Illness in Adolescent-Onset Gender Dysphoria	30

VI.	Alleged Scientific Claims Assessed	32
A.	Conversion Therapy.....	32
B.	Claims that All Childhood Outcome Studies Are Wrong.....	33
C.	Assessing Claims of Suicidality	34
D.	Assessing Demands for Social Transition and Affirmation-Only or Affirmation-on-Demand Treatment in Pre-Pubertal Children.	37
E.	Assessing the “Minority Stress Hypothesis”	41
VII.	Assessing Statements from Professional Associations.....	42
A.	Understanding the Value of Statements from Professional Associations.....	42
B.	Misrepresentations of statements of professional associations.....	43
1.	World Professional Association for Transgender Health (WPATH)	44
2.	Endocrine Society (ES).....	45
3.	Pediatric Endocrine Society and Endocrine Society (ES/PES).....	46
4.	American Academy of Child & Adolescent Psychiatry (AACAP)	47
5.	American College of Obstetricians & Gynecologists (ACOG).....	48
6.	American College of Physicians (ACP)	49
7.	American Academy of Pediatrics (AAP)	51
8.	The ESPE-LWPES GnRH Analogs Consensus Conference Group	51
	References	53

I. Background & Credentials

1. I am a clinical psychologist and Director of the Toronto Sexuality Centre in Canada. For my education and training, I received my Bachelor of Science degree from Rensselaer Polytechnic Institute, where I studied mathematics, physics, and computer science. I received my Master of Arts degree in psychology from Boston University, where I studied neuropsychology. I earned my Doctoral degree in psychology from McGill University, which included successfully defending my doctoral dissertation studying the effects of psychiatric medication and neurochemical changes on sexual behavior, and included a clinical internship assessing and treating people with a wide range of sexual and gender identity issues.

2. Over my academic career, my posts have included Psychologist and Senior Scientist at the Centre for Addiction and Mental Health (CAMH) and Head of Research for CAMH's Sexual Behaviour Clinic, Associate Professor of Psychiatry on the University of Toronto Faculty of Medicine, and Editor-in-Chief of the peer reviewed journal, *Sexual Abuse*. That journal is one of the top-impact, peer-reviewed journals in sexual behavior science and is the official journal of the Association for the Treatment of Sexual Abusers. In that appointment, I was charged to be the final arbiter for impartially deciding which contributions from other scientists in my field merited publication. I believe that appointment indicates not only my extensive experience evaluating scientific claims and methods, but also the faith put in me by the other scientists in my field. I have also served on the Editorial Boards of the *Journal of Sex Research*, the *Archives of Sexual Behavior*, and *Journal of Sexual Aggression*. Thus, although I cannot speak for other scientists, I regularly interact with and am routinely exposed to the views and opinions of most of the scientists active in our field today, within the United States and throughout the world.

3. My scientific expertise spans the biological and non-biological development of human sexuality, the classification of sexual interest patterns, the assessment and

treatment of atypical sexualities, and the application of statistics and research methodology in sex research. I am the author of over 50 peer-reviewed articles in my field, spanning the development of sexual orientation, gender identity, hypersexuality, and atypical sexualities collectively referred to as *paraphilias*. I am the author of the past three editions of the gender identity and atypical sexualities chapter of the *Oxford Textbook of Psychopathology*. These works are now routinely cited in the field and are included in numerous other textbooks of sex research.

4. I began providing clinical services to people with gender dysphoria in 1998. I trained under Dr. Ray Blanchard of CAMH and have participated in the assessment of treatment of over one hundred individuals at various stages of considering and enacting both transition and detransition, including its legal, social, and medical (both cross-hormonal and surgical) aspects. My clinical experience includes the assessment and treatment of several thousand individuals experiencing other atypical sexuality issues. I am regularly called upon to provide objective assessment of the science of human sexuality by the courts (prosecution and defense), professional media, and mental health care providers.

5. I have served as an expert witness in a total of 14 cases, which are listed in my *curriculum vitae*, attached here as Appendix 1, which includes a list of cases in which I have recently testified.

6. A substantial proportion of the existing research on gender dysphoria comes from two clinics, one in Canada and one in the Netherlands. The CAMH gender clinic (previously, Clarke Institute of Psychiatry) was in operation for several decades, and its research was directed by Dr. Kenneth Zucker. I was employed by CAMH between 1998 and 2018. I was a member of the hospital's adult forensic program. However, I was in regular contact with members of the CAMH child psychiatry program (of which Dr. Zucker was a member), and we collaborated on multiple projects.

7. For my work in this case, I am being compensated at the hourly rate of \$400 per hour. My compensation does not change based on the conclusions and opinions that I provide here or later in this case or on the outcome of this lawsuit.

II. Introduction

8. The principal opinions that I offer and explain in detail in this report are:
- a. Biological sex is a clear, scientifically valid, and well-defined category.
The existence of disorders of sexual development in an extremely small proportion of individuals does not change this.
 - b. Neither early-onset (childhood) gender dysphoria nor adolescent-onset gender dysphoria can be assumed to reflect a fixed aspect of a person's psychological make-up or self-perception.
 - c. No study has demonstrated that "affirming" the transgender identity of a child or adolescent produces better mental health outcomes or reduced suicidality relative to psychotherapy and mental health support.
 - d. On the contrary, the contemporary studies have failed to find improved mental health in teens and young adults after administration of puberty blockers and/or cross-sex hormones.
 - e. e) Affirmation of a transgender identity in minors who suffer from early-onset or adolescent-onset gender dysphoria is not an accepted "standard of care."

In addition, I have been asked to provide an expert opinion on how relevant professional organizations have addressed these questions and whether any of them have taken any meritorious position that would undermine West Virginia's Protect Women's Sports Act (H.B. 3292) ("Act"). As I explain in detail in this report, it is my opinion that Plaintiffs' expert reports display a wide variety of flaws that call their conclusions into question and that no professional organization has articulated a meritorious position that calls into question the basis for the Act.

9. To prepare the present report, I reviewed the following resources related to this litigation:

- a. West Virginia's Protect Women's Sports Act, H.B. 3293.
- b. The Amended Complaint in this litigation.
- c. Ms. Armistead's Declaration, Doc. 95-1.
- d. Declaration and Expert Report of Deanna Adkins, MD.
- e. Expert Report and Declaration of Joshua D. Safer, MD, FACP, FACE.

III. Clarifying Terms

10. Most scientific discussions begin with the relevant vocabulary and definitions of terms. In the highly polarized and politicized debates surrounding transgender issues, that is less feasible: Different authors have used terms in differing, overlapping ways. Activists and the public (especially on social media) will use the same terms, but to mean different things, and some have actively misapplied terms so that original documents appear to assert something they do not.

11. "Gender expression" is one such term. For another example, the word "child" is used in some contexts to refer specifically to children before puberty; in some contexts, to refer to children before adolescence (thus including ages of puberty); in still other contexts, to refer to people under the legal age of consent, which is age sixteen in the Netherlands (where much of the research was conducted) or age eighteen in much of North America. Thus, care should be taken in both using and interpreting the word "child" in this field.

12. Because the present document is meant to compare the claims made by others, it is the definitions used by those specific authors in those specific contexts which are relevant. Thus, definitions to my own uses of terms are provided where appropriate, but primarily explicate how terms were defined and used in their original contexts.

IV. Evidence Cited by Plaintiffs' Expert Reports

13. Dr. Adkins claimed a person's gender identity cannot be voluntarily changed. In actual clinical practice, that is rarely the relevant issue. The far more typical situation is youth who are *mistaken* about their gender identity. These youth are misinterpreting their experiences to indicate they are transgender, or they are exaggerating their descriptions of their experiences in service of attention-seeking or other psychological needs. Dr. Adkins' claim is not merely lacking any science to support it; the claim itself defies scientific thinking. In science, it is not possible to know that gender identity cannot be changed: We can know only that we lack evidence of such a procedure. In the scientific method, it remains eternally possible for evidence of such a treatment to emerge, and unlike sexual orientation's long history with conversion therapy, there have not been systematic attempts to change gender identity.

14. Dr. Adkins claimed that untreated gender dysphoria can result in several mental health issues, including suicidality. The relevant research on suicidality is summarized in its own section to follow. Nonetheless, Dr. Adkins' claim is a misleading half-truth: Missing is that people with gender dysphoria continue to experience those mental health symptoms even after they do transition, including a 19 times greater risk of death from suicide.¹ This is why clinical guidelines repeatedly indicate that mental health issues should be resolved *before* any transition, as indicated in multiple sets of clinical guidelines, summarized in their own section to follow. As emphasized even by authorities Dr. Adkins cites herself: Transition should not be relied upon itself to improve mental health status.

15. Adkins' support for the claim that untreated gender dysphoria lessens mental health consisted of two articles: Olson, *et al.* (2016) and Spack (2012). Such is a terrible misrepresentation of the state of the scientific literature. Although Olson,

¹ Dhejne, *et al.*, 2011.

et al., did indeed report that gender dysphoric children showed no mental health differences from the non-transgender control groups, Olson's report turned out to be incorrect. The Olson data were reanalyzed, and after correcting for statistical errors in the original analysis, the data instead showed that the gender dysphoric children under Olson's care *did*, in fact, exhibit significantly lower mental health.²

16. I conducted an electronic search of the research literature to identify any responses from the Olson team regarding the Schumm and Crawford re-analysis of the Olson data and was not able to locate any. I contacted Professor Schumm by email on August 22, 2021 to verify that conclusion, to which he wrote there has been: "No response [from Olson]."³

17. Adkins also misrepresented the views of Dr. Norman Spack. The article Adkins cited—Spack, 2012—repeatedly emphasized that children with gender dysphoria exhibit very many symptoms of mental illnesses. Spack asserted unambiguously that "Gender dysphoric children who do not receive *counseling* have a high risk of behavioural and emotional problems and psychiatric diagnoses."⁴ The wording of Dr. Adkins' report ("gender dysphoria . . . if left untreated") misrepresents Spack so as to suggest Spack was advocating for medical transition to treat the gender dysphoria rather than counseling to treat suicidality and any other mental health issues. Moreover still, missing from Adkins' report was Spack's conclusion that "[m]ental health intervention should persist for the long term, even after surgery, *as patients continue to be at mental health risk, including for suicide*. While the causes of suicide are multifactorial, the possibility cannot be ruled out that some patients unrealistically believe that surgery(ies) solves their psychological distress."⁵ Whereas

² Schumm & Crawford, 2020; Schumm, *et al.*, 2019.

³ Schumm, email communication, Aug. 22, 2021 (on file with author).

⁴ Spack, *et al.*, 2012, at 422, italics added.

⁵ Spack, *et al.*, 2013, at 484, italics added

Adkins (selectively) cited Spack to support her insinuation that transition relieves distress, Spack instead explicitly warned against drawing exactly that conclusion.

18. Next, Adkins claimed to have achieved levels of success in her professional clinical practice unlike those reported by anyone anywhere else in the world: “All of my patients have suffered from persistent gender dysphoria, which has been alleviated through clinical appropriate treatment.”⁶ It is difficult to evaluate such a bold self-assessment of success. No clinic has published success rates even approximating this. By contrast, the peer-reviewed research literature repeatedly indicates that clients misrepresent themselves to their care-providers, engaging in “image management” so as to appear as having better mental health than they actually do.⁷ In the absence of objective evidence, it is not possible to differentiate Adkins’ claims of success from the simpler explanation that she and her patients are telling each other what they want and expect to hear.

19. Adkins referred to the clinical practice guidelines (CPG’s) of three professional societies: the American Association of Pediatrics (AAP), the World Professional Association for Transgender Health (WPATH), and the Endocrine Society. This provides only an incomplete and inaccurate portrayal of the field. I am aware of six rather than three professional societies providing clinical guidelines for the care of gender dysphoric children. They are detailed more fully in their own section of this report. Nonetheless, with the broad exception of the AAP, their statements repeatedly noted:

- Desistance of gender dysphoria occurs in the majority of prepubescent children.
- Mental health issues need to be assessed as potentially contributing factors and need to be addressed before transition.
- Puberty-blocking medication is an experimental, not a routine, treatment.

⁶ Adkins Report at 5.

⁷ Anzani, *et al.*, 2020; Lehmann, *et al.*, 2021.

- Social transition is not generally recommended until after puberty.

Although some other associations have published broad statements of moral support for sexual minorities and against discrimination, they did not include any specific standards or guidelines regarding medical- or transition-related care.

20. Although Adkins referred to them as “widely accepted,” the WPATH and the Endocrine Society guidelines have both been subjected to standardized evaluation, the Appraisal of Guidelines for Research and Evaluation (“AGREE II”) method, as part of an appraisal of all published CPGs regarding sex and gender minority healthcare.⁸ Utilizing community stakeholders to set domain priorities for the evaluation, the assessment concluded that the guidelines regarding HIV and its prevention were of high quality, but that “[t]ransition-related CPGs tended to lack methodological rigour and rely on patchier, lower-quality primary research.”⁹ Neither the Endocrine Society’s or WPATH’s guidelines were recommended for use. Indeed, the WPATH guidelines received unanimous ratings of “Do not recommend.”¹⁰

21. Immediately following the publication of the AAP policy, I conducted a point-by-point fact-check of the claims it asserted and the references it cited in support. I submitted that to the *Journal of Sex & Marital Therapy*, a well-known research journal of my field, where it underwent blind peer review and was published. I append that article as part of this report. See Appendix 2. A great deal of published attention ensued; however, the AAP has yet to respond to the errors I demonstrated its policy contained. Writing for *The Economist* about the use of puberty blockers, Helen Joyce asked AAP directly, “Has the AAP responded to Dr Cantor? If not, have you any response now?” The AAP Media Relations Manager, Lisa Black, responded: “We do not have anyone available for comment.”

⁸ Dahlen, *et al.*, 2021.

⁹ Dahlen, *et al.*, 2021, at 6.

¹⁰ Dahlen, *et al.*, 2021, at 7.

22. Finally, the clinical guidelines from all these associations have become largely outdated. As detailed in the *Studies of Transition Outcomes* section of this report, there was some reason, circa 2010, to expect positive outcomes among children who transition, owing to optimistic findings reported from the Netherlands.¹¹ Early positive findings, however, have been retracted after statistical errors were identified,¹² or shown to be more attributable to mental health counseling rather than to medical transition.¹³ The professional societies' statements were produced during that earlier phase.

23. In contrast with these U.S.-based associations, public healthcare systems throughout the world have instead been withdrawing their earlier support for childhood transition, responding to the increasingly recognized risks associated with hormonal interventions and the now clear lack of evidence that medical transition was benefitting most children, as opposed to the mental health counseling accompanying transition. These have included Sweden^{14, 15}, Finland^{16, 17}, and the United Kingdom¹⁸, and the Royal Australian and New Zealand College of Psychiatrists.¹⁹

24. Adkins repeatedly claimed success on the basis of what her patients tell her. In the absence of any systematic method, however, it is not possible to evaluate to what extent such a conclusion reflects human recall bias, cases of negative outcomes dropping out of treatment thus becoming invisible to Adkins, the aforementioned impression management efforts of clients, psychotherapy that they were receiving at the same time, or simple maturation during which the patients

¹¹ de Vries, et al., 2011.

¹² Kalin, 2020.

¹³ c.f., Carmichael, *et al.*, 2021; Biggs, 2019; Biggs, 2020.

¹⁴ Swedish Agency of Health Technology Assessment and Assessment of Social Services, 2019.

¹⁵ Nainggolan, 2021.

¹⁶ Finland Ministry of Social Affairs and Health, Council for Choices in Health Care, 2020, June 11.

¹⁷ Finland Ministry of Social Affairs and Health, Council for Choices in Health Care, 2020, June 16.

¹⁸ United Kingdom National Health Service (NHS), 2021, March 11.

¹⁹ McCall, 2021.

would have experienced improved mental health regardless of transition. Indeed, the very purpose of engaging in systematic, peer-reviewed research instead of relating anecdotal recollections is to rule out exactly these biases.

25. Adkins referred to disorders of sexual development (DSDs) and intersex variations to claim that the very notion of there being two sexes is inherently flawed (*i.e.*, challenging “singular biological sex”). Although they both potentially involve medical alteration of genitalia, these are not comparable issues. DSDs and intersex conditions develop before birth, and objective medical testing is capable of confirming diagnoses. Her claims not only misrepresent the research literature on DSDs, but also failed to engage the relevant scientific concept, “construct validity.” Adkins claimed DSD prevalences of 1 in 1000 live births and 1 in 300 people in the world (Adkins Report at 11), leaving unclear how there could be a larger proportion of such people living in the world than are born in the first place. The scientific literature, however, shows that DSDs are much rarer than this²⁰ and that the very large majority of DSDs are the hypospadias—mislocations of the urethra on the penis.²¹ Because of the biological processes involved in causing them, hypospadias are classified as disorders of sexual development. That some boys are born with mislocated urethra is falsely taken by Adkins to demonstrate that ‘there are more than just boys and girls’.

26. Overall, Adkins’ argument was that, because there exist exceptions among features which distinguish male from female, the distinction itself is entirely moot. Although she did not use the term, Adkins is claiming that the existence of these exceptions demonstrates that sex lacks “construct validity.” Her argument does not, however, follow from how construct validity is determined in science—very many scientific classification systems include exceptions. Scientific constructs are not

²⁰ Sax, 2002.

²¹ Bancroft, 2009.

determined by any one of the components it reflects, in this case being each of the sex chromosomes, sex hormones, sexually dimorphic genitalia, etc. Rather, such constructs are represented by the generalizable interrelationships among its multiple components. Notwithstanding exceptions in an individual component in an individual case, the interrelationships among the network of components remains intact. The existence of people born with a clubfoot or undeveloped leg does not challenge the classification of humans as a bipedal species.

27. Similarly to Dr. Adkins, Dr. Safer claimed that “gender identity is durable and cannot be changed by medical intervention,” providing no evidence or reference to the research literature. It is not at all apparent upon what basis such a statement about durability can be made, however. It has been the unanimous conclusion of every follow-up study of gender dysphoric children ever conducted, not only that gender identity does change, but also that it changes in the large majority of cases, as documented below. This is, of course, very different from what is reported by transgender adults—they are the very people for whom gender dysphoria did endure. Regarding responses to clinical intervention, I am not aware of, and Safer did not cite any research reports of medical interventions attempting to change gender identity, regardless of outcome. It is not clear whether Safer intended this comment to apply also to psychological/non-medical interventions.

V. Evidence Missing from Plaintiffs’ Expert Reports

28. One of the most widespread public misunderstandings about transsexualism and people with gender dysphoria is that all cases of gender dysphoria represent the same phenomenon; however, the clinical science has long and consistently demonstrated that gender dysphoric children (cases of *early-onset* gender dysphoria) do not represent the same phenomenon as adult gender dysphoria

(cases of *late-onset* gender dysphoria),²² merely attending clinics at younger ages. That is, gender dysphoric children are not simply younger versions of gender dysphoric adults. They differ in every known regard, from sexual interest patterns, to responses to treatments. A third presentation has recently become increasingly observed among people presenting to gender clinics: These cases appear to have an onset in adolescence in the absence of any childhood history of gender dysphoria. Such cases have been called adolescent-onset or “rapid-onset” gender dysphoria (ROGD).

29. In the context of school athletics, the adult-onset phenomenon would not seem relevant; however, very many public misunderstandings and expert misstatements come from misattributing evidence or personal experience from one of these types to the other. For example, there exist only very few cases of transition regret among adult transitioners, whereas the research has unanimously shown that the majority of children with gender dysphoria desist—that is, cease to experience such dysphoria by or during puberty. A brief summary of the adult-onset phenomenon is included, to facilitate distinguishing features which are unique to childhood gender dysphoria.

A. Adult-Onset Gender Dysphoria

30. People with adult-onset gender dysphoria typically attend clinics requesting transition services in mid-adulthood, usually in their 30s or 40s. Such individuals are nearly exclusively male.²³ They typically report being sexually attracted to women and sometimes to both men and women. Some cases profess asexuality, but very few indicate any sexual interest in or behavior involving men.²⁴ Cases of adult-onset gender dysphoria are typically associated with a sexual interest pattern (medically, a *paraphilia*) involving themselves in female form.²⁵

²² Blanchard, 1985.

²³ Blanchard, 1990, 1991.

²⁴ Blanchard, 1988.

²⁵ Blanchard 1989a, 1989b, 1991.

1. Outcome Studies of Transition in Adult-Onset Gender Dysphoria

31. Clinical research facilities studying gender dysphoria have repeatedly reported low rates of regret (less than 3%) among adult-onset patients who underwent complete transition (*i.e.*, social, plus hormonal, plus surgical transition). This has been widely reported by clinics in Canada,²⁶ Sweden,²⁷ and the Netherlands.²⁸

32. Importantly, each of the Canadian, Swedish, and Dutch clinics for adults with gender dysphoria all performed “gate-keeping” procedures, disqualifying from medical services people with mental health or other contraindications. One would not expect the same results to emerge in the absence of such gate-keeping or when gate-keepers apply only minimal standards or cursory assessment.

2. Mental Health Issues in Adult-Onset Gender Dysphoria

33. The research evidence on mental health issues in gender dysphoria indicates it to be different between adult-onset versus adolescent-onset versus prepubescent-onset types. The co-occurrence of mental illness with gender dysphoria in adults is widely recognized and widely documented.²⁹ A research team in 2016 published a comprehensive and systematic review of all studies examining rates of mental health issues in transgender adults.³⁰ There were 38 studies in total. The review indicated that many studies were methodologically weak, but nonetheless concluded (1) that rates of mental health issues among people are highly elevated both before and after transition, (2) but that rates were less elevated among those who completed transition. Analyses were not conducted in a way so as to compare the elevation in mental health issues observed among people newly attending clinics to improvement after transition. Also, several studies showed more than 40% of patients

²⁶ Blanchard, *et al.*, 1989.

²⁷ Dhejneberg, *et al.*, 2014.

²⁸ Wiepjes, *et al.*, 2018.

²⁹ See, *e.g.*, Hepp, *et al.*, 2005.

³⁰ Dhejne, *et al.*, 2016.

becoming “lost to follow-up.” With attrition rates that high, it is unclear to what extent the information from the available participants genuinely reflects the whole sample. The very high “lost to follow-up” rate leaves open the possibility of considerably more negative results overall.

34. An important caution applies to interpreting these results: These very high proportions of mental health issues come from people who are attending a clinic for the first time and are undergoing assessment. Clinics serving a “gate-keeper” role divert candidates with mental health issues away from medical intervention. The side-effect of removing these people from the samples of transitioners is that if a researcher compared the average mental health of individuals coming into the clinic with the average mental health of individuals going through medical transition, then the post-transition group would appear to show a substantial improvement, even though transition had *no effect at all*: The removal of people with poorer mental health created the statistical illusion of improvement among the remaining people.

35. The long-standing and consistent finding that gender dysphoric adults have high rates of mental health issues both before and after transition and the finding that those mental health issues cause the gender dysphoria (the epiphenomenon) rather than the other way around indicate a critical point: To the extent that gender dysphoric children resemble adults, we should not expect mental health to improve as a result of transition. Mental health issues should be resolved before any transition.

B. Childhood Onset (Pre-Puberty) Gender Dysphoria

1. Prospective Studies of Childhood-Onset Gender Dysphoria Show that Most Children Desist in the “Natural Course” by Puberty

36. The large majority of childhood onset cases of gender dysphoria occur in biological males, with clinics reporting 2–6 biological male children to each female.³¹

37. Prepubescent children (and their parents) have been approaching mental health professionals for help with their unhappiness with their sex and belief they would be happier living as the other for many decades. Projects following-up and reporting on such cases began being published in the 1970s, with subsequent generations of research employing increasingly sophisticated methods studying the outcomes of increasingly large samples. In total, there have now been a total of 11 such outcomes studies. *See* the appendix to Appendix 2 (listing these studies).

38. In sum, despite coming from a variety of countries, conducted by a variety of labs, using a variety of methods, all spanning four decades, every study without exception has come to the identical conclusion: Among prepubescent children who feel gender dysphoric, the majority cease to want to be the other gender over the course of puberty—ranging from 61–88% desistance across the large, prospective studies. Such cases are often referred to as “desisters,” whereas children who continue to feel gender dysphoria are often called “persisters.”

39. Notably, in most cases, these children were receiving professional psychosocial support across the study period aimed not at affirming cross-gender identification, but at resolving stressors and issues potentially interfering with desistance. While beneficial to these children and their families, the inclusion of therapy in the study protocol represents a complication for the interpretation of the results: That is, it is not possible to know to what extent the observed outcomes (predominant desistance, with a small but consistent occurrence of persistence) were

³¹ Cohen-Kettenis, *et al.*, 2003; Steensma, *et al.*, 2018; Wood, *et al.*, 2013.

influenced by the psychosocial support, or would have emerged regardless. It can be concluded only that prepubescent children who suffer gender dysphoria and receive psychosocial support focused on issues other than “affirmation” of cross-gender identification do in fact desist in suffering from gender dysphoria, at high rates, over the course of puberty.

40. While the absolute number of those who present as prepubescent children with gender dysphoria and “persist” through adolescence is very small in relation to the total population, persistence in some subjects was observed in each of these studies. Thus, the clinician cannot take either outcome for granted.

41. It is because of this long-established and invariably consistent research finding that desistance is probable, but not inevitable, that the “watchful waiting” method became the standard approach for assisting gender dysphoric children. The balance of potential risks to potential benefits is very different for groups likely to desist versus groups unlikely to desist: If a child is very likely to persist, then taking on the risks of medical transition might be more worthwhile than if that child is very likely to desist in transgender feelings.

42. The consistent observation of high rates of desistance among pre-pubertal children who present with gender dysphoria demonstrates a pivotally important—yet often overlooked—feature: because gender dysphoria so often desists on its own, clinical researchers cannot assume that therapeutic intervention cannot facilitate or speed desistance for at least some patients. Such is an empirical question, and there has not yet been any such study.

43. It is also important to note that research has not yet identified any reliable procedure for discerning which children who present with gender dysphoria will persist, as against the majority who will desist, absent transition and “affirmation.” Such a method would be valuable, as the more accurately that potential persisters can be distinguished from desisters, the better the risks and benefits of options can

be weighted. Such “risk prediction” and behavioral “test construction” are standard components of applied statistics in the behavioral sciences. Multiple research teams have reported that, on average, groups of persisters are somewhat more gender non-conforming than desisters, but not so different as to usefully predict the course of a particular child.³²

44. In contrast, a single research team, led by Dr. Kristina Olson, claimed the opposite, asserting to have developed a method of distinguishing persisters from desisters, using a single composite score representing a combination of children’s “peer preference, toy preference, clothing preference, gender similarity, and gender identity.”³³ That team reported a statistical association (mathematically equivalent to a correlation) between that composite score and the probability of persistence. As they described their result, “Our model predicted that a child with a gender-nonconformity score of .50 would have roughly a .30 probability . . . of socially transitioning. By contrast, a child with gender-nonconformity score of .75 would have roughly a .48 probability.”³⁴ Although the authors declared that “social transitions may be predictable from gender identification and preferences,”³⁵ their actual results suggest the opposite: The gender-nonconforming group who went on to transition (socially) had a mean composite score of .73 (which is less than .75), and the gender-nonconforming group who did not transition had a mean composite score of .61, also less than .75.³⁶ Both of those are lower than the value of .75, so both of those would be more likely than not to desist, rather than to proceed to transition. Thus, Olson’s model does not distinguish likely from unlikely to transition; rather, it distinguishes unlikely from even less likely to transition.

³² Singh, *et al.* (2021); Steensma *et al.*, 2013.

³³ Rae, *et al.*, 2019, at 671.

³⁴ Rae, *et al.*, 2019, at 673.

³⁵ Rae, *et al.*, 2019, at 669.

³⁶ Rae, *et al.*, 2019, Supplemental Material at 6, Table S1, bottom line.

45. Although it remains possible for some future finding to yield a method to identify with sufficient accuracy which gender dysphoric children will persist, there does not exist such a method at the present time. Moreover, in the absence of long-term follow-up, it cannot be known what proportions come to regret having transitioned and then *detransition*. Because only a minority of gender dysphoric children persist in feeling gender dysphoric in the first place, “transition-on-demand” increases the probability of unnecessary transition and unnecessary medical risks.

2. “Watchful Waiting” and “The Dutch Approach”

46. It was this state of the science—that the majority of prepubescent children will desist in their feelings of gender dysphoria and that we lack an accurate method of identifying which children will persist—that led to the development of a clinical approach, often called “The Dutch Approach” (referring to The Netherlands clinic where it was developed) including “Watchful Waiting” periods. Internationally, the Dutch Approach is currently the most widely respected and utilized method for treatment of children who present with gender dysphoria.

47. The purpose of these methods was to compromise the conflicting needs among: clients’ desires upon assessment, the long-established and repeated observation that those preferences will change in the majority of (but not all) childhood cases, and that cosmetic aspects of medical transition are perceived to be better when they occur earlier rather than later.

48. The Dutch Approach (also called the “Dutch Protocol”) was developed over many years by the Netherlands’ child gender identity clinic, incorporating the accumulating findings from their own research as well as those reported by other clinics working with gender dysphoric children. They summarized and explicated the approach in their peer-reviewed report, *Clinical management of gender dysphoria in children and adolescents: The Dutch Approach* (de Vries & Cohen-Kettenis, 2012).

The components of the Dutch Approach are:

- no social transition at all considered before age 12 (watchful waiting period),
- no puberty blockers considered before age 12,
- cross-sex hormones considered only after age 16, and
- resolution of mental health issues before any transition.

49. For youth under age 12, “the general recommendation is watchful waiting and carefully observing how gender dysphoria develops in the first stages of puberty.”³⁷

50. The age cut-offs of the Dutch Approach authors were not based on any research demonstrating their superiority over other potential age cut-offs. Rather, they were chosen to correspond to ages of consent to medical procedures under Dutch law. But whatever their original rationale, the data from this clinic simply contains no information about safety or efficacy of these measures at younger ages.

51. The authors of the Dutch Approach repeatedly and consistently emphasize the need for extensive mental health assessment, including clinical interviews, formal psychological testing with validated psychometric instruments, and multiple sessions with the child and the child’s parents.

52. Within the Dutch approach, there is no social transition before age twelve. That is, social affirmation of the new gender may not begin until age 12—as desistance is less likely to occur past that age. “Watchful Waiting” refers to a child’s developmental period up to that age. Watchful waiting does not mean do nothing but passively observe the child. Such children and families typically present with substantial distress involving both gender and non-gender issues. It is during the watchful waiting period that a child (and other family members as appropriate) would undergo therapy, resolving other issues which may be exacerbating psychological stress or dysphoria. As noted by the Dutch clinic, “[T]he adolescents in this study received extensive family or other social support . . . [and they] were all regularly

³⁷ de Vries & Cohen-Kettenis, 2012, at 301.

seen by one of the clinic’s psychologists or psychiatrists.”³⁸ One is actively treating the person, while carefully “watching” the dysphoria.

53. The inclusion of psychotherapy and support during the watchful waiting period is, clinically, a great benefit to the gender dysphoric children and their parents. The inclusion of psychotherapy and support poses a scientific complication, however: It becomes difficult to know to what extent the outcomes of these cases might be related to receiving psychotherapy received versus being “spontaneous” desistance, which would have occurred on its own anyway. This situation is referred to in science as a “confound.”

3. Studies of Transition Outcomes: Overview

54. Very many strong claims have appeared in the media and on social media asserting that transition results in improved mental health or, contradictorily, in decreased mental health. In the highly politicized context of gender and transgender research, many authors have cited only the findings which appear to support one side, cherry-picking from the complete set of research reports. Seemingly contradictory findings are common in science with on-going research projects. When considered together, however, the full set of relevant reports show that a coherent pattern and conclusion has emerged over time, as detailed in the following sections. Initial optimism was suggested by reports of improvements in mental health.³⁹ Upon continued analysis, these seeming successes turned out to be illusory, however: The Bränström and Pachankis (2019) finding has been retracted.⁴⁰ The greater mental health among transitioners reported by Costa, *et al.* (2015) was noted to be because the control group consisted of cases excluded from hormone eligibility exactly because they showed poor mental health to begin with.⁴¹ The improvements reported by the

³⁸ de Vries, *et al.*, 2011, at 2280-81.

³⁹ Bränström & Pachankis 2019; Costa, *et al.*, 2015; de Vries, *et al.*, 2011; de Vries, *et al.*, 2014.

⁴⁰ Kalin, 2020.

⁴¹ Biggs, 2019.

de Vries studies from the Dutch Clinic themselves appear genuine; however, because that clinic also provides psychotherapy to all cases receiving puberty-blockers, it remains entirely plausible that the psychotherapy and not the puberty blockers caused the improvements.⁴² New studies continued to appear an accelerating rate, repeatedly reporting deteriorations or lacks of improvement in mental health⁴³ or lack of improvement beyond psychotherapy alone,⁴⁴ and other studies continue to report on only the combined effect of both psychotherapy and hormone treatment together.⁴⁵

**a. Outcomes of The Dutch Approach (studies from before 2017):
Mix of positive, negative, and neutral outcomes**

55. The research confirms that some, but not all, adolescents improve on some, but not all, indicators of mental health and that those indicators are inconsistent across studies. Thus, the balance of potential benefits to potential risks differs across cases, and thus suggests different courses of treatment across cases.

56. The Dutch clinical research team followed up 70 youth undergoing puberty suppression at their clinic.⁴⁶ The youth improved on several variables upon follow-up as compared to pre-suppression measurement, including depressive symptoms and general functioning. No changes were detected in feelings of anxiety or anger or in gender dysphoria as a result of puberty suppression; however, natal females using puberty suppression suffered *increased* body dissatisfaction both with their secondary sex characteristics and with nonsexual characteristics.⁴⁷

57. As the report authors noted, while it is possible that the improvement on some variables was due to the puberty-blockers, it is also possible that the improvement was due to the mental health support, and it is possible that the

⁴² Biggs, 2020.

⁴³ Carmichael, *et al.*, 2021; Hisle-Gorman, *et al.*, 2021; Kaltiala, *et al.*, 2020.

⁴⁴ Achille, *et al.*, 2020.

⁴⁵ Kuper, *et al.*, 2020; van der Miesen, *et al.*, 2020, at 703.

⁴⁶ de Vries, *et al.* 2011.

⁴⁷ Biggs, 2020.

improvement occurred only on its own with natural maturation. So any conclusion that puberty blockers improved the mental health of the treated children is not justified by the data. Because this study did not include a control group (another group of adolescents matching the first group, but *not* receiving medical or social support), these possibilities cannot be distinguished from each other, representing a confound. The authors of the study were explicit in noting this themselves: “All these factors may have contributed to the psychological well-being of these gender dysphoric adolescents.”⁴⁸

58. The authors were careful not to overstate the implications of their results, “We *cautiously* conclude that puberty suppression *may be* a valuable *element* in clinical management of adolescent gender dysphoria.”⁴⁹

59. Costa, *et al.* (2015) reported on preliminary outcomes from the Tavistock and Portman NHS Foundation Trust clinic in the UK. They compared the psychological functioning of one group of youth receiving psychological support with a second group receiving both psychological support as well as puberty blocking medication. Both groups improved in psychological functioning over the course of the study, but no statistically significant differences between the groups was detected at any point.⁵⁰ As those authors concluded, “Psychological support and puberty suppression were both associated with an improved global psychosocial functioning in GD adolescence. Both these interventions may be considered effective in the clinical management of psychosocial functioning difficulties in GD adolescence.”⁵¹ Because psychological support does not pose the physical health risks that hormonal interventions or surgery does (such as loss of reproductive function), one cannot justify taking on the greater risks of social transition, puberty blockers or surgery

⁴⁸ de Vries, *et al.* 2011, at 2281.

⁴⁹ de Vries, *et al.* 2011, at 2282, italics added.

⁵⁰ Costa, *et al.*, at 2212 Table 2.

⁵¹ Costa, *et al.*, at 2206.

without evidence of such treatment producing superior results. Such evidence does not exist.

b. Clinicians and advocates have invoked the Dutch Approach while departing from its protocols in important ways.

60. The reports of partial success contained in de Vries, *et al.* 2011 called for additional research, both to confirm those results and to search for ways to maximize beneficial results and minimize negative outcomes. Instead, many other clinics and clinicians proceeded on the basis of the positives only, broadened the range of people beyond those represented in the research findings, and removed the protections applied in the procedures that led to those outcomes. Many clinics and individual clinicians have reduced the minimum age for transition to 10 instead of 12. While the Dutch Protocol involves interdisciplinary teams of clinicians, many clinics now rely on a single assessor, in some cases one without adequate professional training in childhood and adolescent mental health. Comprehensive, longitudinal assessments (*e.g.*, one and a half years⁵²) became approvals after one or two assessment sessions. Validated, objective measures of youths' psychological functioning were replaced with clinicians' subjective (and first) opinions, often reflecting only the clients' own self-report. Systematic recordings of outcomes, so as to allow for detection and correction of clinical deficiencies, were eliminated.

61. Notably, Dr. Thomas Steensma, central researcher of the Dutch clinic, has decried other clinics for "blindly adopting our research" despite the indications that those results may not actually apply: "We don't know whether studies we have done in the past are still applicable to today. Many more children are registering, and also a different type."⁵³ Steensma opined that "every doctor or psychologist who is involved in transgender care should feel the obligation to do a good pre- and post-test." But few if any are doing so.

⁵² de Vries, *et al.*, 2011.

⁵³ Tetelepta, 2021.

c. Studies by other clinicians in other countries have failed to reliably replicate the positive components of the results reported by the Dutch clinicians in de Vries et al. 2011.

62. The indications of potential benefit from puberty suppression in at least some cases has led some clinicians to attempt to replicate the positive aspects of those findings. These efforts have not succeeded.

63. The Tavistock and Portman clinic in the U.K. recently released its findings, attempting to replicate the outcomes reported by the Dutch clinic.⁵⁴ Study participants were ages 12–15 (Tanner stages 3 for natal males, Tanner 2 for natal females) and were repeatedly tested before beginning puberty-blocking medications and then every six months thereafter. Cases exhibiting serious mental illnesses (*e.g.*, psychosis, bipolar disorder, anorexia nervosa, severe body-dysmorphic disorder unrelated to gender dysphoria) were excluded. Relative to the time point before beginning puberty suppression, there were *no* significant changes in any psychological measure, from either the patients' or their parents' perspective.

64. A multidisciplinary team from Dallas published a prospective follow-up study which included 25 youths as they began puberty suppression.⁵⁵ (The other 123 study participants were undergoing cross-sex hormone treatment.) Interventions were administered according to "Endocrine Society Clinical Practice Guidelines."⁵⁶ Their analyses found *no statistically significant changes* in the group undergoing puberty suppression on any of the nine measures of wellbeing measured, spanning tests of body satisfaction, depressive symptoms, or anxiety symptoms.⁵⁷ (Although the authors reported detecting some improvements, these were only found when the large group undergoing cross-sex hormone treatment were added in.) Although the Dutch

⁵⁴ Carmichael, *et al.*, 2021.

⁵⁵ Kuper, *et al.*, 2020, at 5.

⁵⁶ Kuper, *et al.*, 2020, at 3, referring to Hembree, *et al.*, 2017.

⁵⁷ Kuper, *et al.*, 2020, at Table 2.

Approach includes age 12 as a minimum for puberty suppression treatment, this team provided such treatment beginning at age 9.8 years (full range: 9.8–14.9 years).⁵⁸

65. Achille, *et al.* (2020) at Stony Brook Children’s Hospital in New York treated a sample of 95 youth with gender dysphoria, providing follow-up data on 50 of them. (The report did not indicate how these 50 were selected from the 95.) As well as receiving puberty blocking medications, “Most subjects were followed by mental health professionals. Those that were not were encouraged to see a mental health professional.”⁵⁹ The puberty blockers themselves “were introduced in accordance with the Endocrine Society and the WPATH guidelines.”⁶⁰ Upon follow-up, some incremental improvements were noted; however, after statistically adjusting for psychiatric medication and engagement in counselling, “*most predictors did not reach statistical significance.*”⁶¹ That is, puberty blockers did not improve mental health any more than did mental health care on its own.

66. In a recent update, the Dutch clinic reported continuing to find improvement in transgender adolescents’ psychological functioning, reaching age-typical levels, “after the start of specialized transgender care involving puberty suppression.”⁶² Unfortunately, because the transgender care method of that clinic involves both psychosocial support and puberty suppression, it cannot be known which of those (or their combination) is driving the improvement. Also, the authors indicate that the changing demographic and other features among gender dysphoric youth might have caused the treated group to differ from the control group in unknown ways. As the study authors themselves noted, “The present study can, therefore, not provide

⁵⁸ Kuper, *et al.*, 2020, at 4.

⁵⁹ Achille, *et al.*, 2020, at 2.

⁶⁰ Achille, *et al.*, 2020, at 2.

⁶¹ Achille, *et al.*, 2020, at 3 (*italics added*).

⁶² van der Miesen, *et al.*, 2020, at 699.

evidence about the direct benefits of puberty suppression over time and long-term mental health outcomes.”⁶³

67. It has not yet been determined why the successful outcomes reported by the Dutch child gender clinic a decade ago failed to emerge when applied by others more recently. It is possible that:

- (1) The Dutch Approach itself does *not* work and that their originally successful results were a fluke;
- (2) The Dutch Approach *does* work, but only in the Netherlands, with local cultural, genetic, or other unrecognized factors that do not generalize to other countries;
- (3) The Dutch Approach itself *does* work, but other clinics and individual clinicians are removing safeguards and adding short-cuts to the approach, and those changes are hampering success.
- (4) The Dutch Approach *does* work, but the cause of the improvement is the psychosocial support, rather than any medical intervention, which other clinics are *not* providing.

68. The failure of other clinics to repeat the already very qualified success of the Dutch clinic demonstrates the need for still greater caution before endorsing transition and the greater need to resolve potential mental health obstacles before doing so.

4. Mental Health Issues in Childhood-Onset Gender Dysphoria

69. As shown by the outcomes studies, there is no statistically significant evidence that transition reduces the presence of mental illness among transitioners. As shown repeatedly by clinical guidelines from multiple professional associations, mental health issues are expected or required to be resolved *before* undergoing transition. The reasoning behind these conclusions is that children may be expressing gender dysphoria, not because they are experiencing what gender dysphoric adults report, but because they mistake what their experiences indicate or to what they might lead. For example, a child experiencing depression from social

⁶³ van der Miesen, *et al.*, 2020, at 703.

isolation might develop hope—and the unrealistic expectation—that transition will help them fit in, this time as and with the other sex.

70. If a child undergoes transition, discovering only then that their mental health or social situations will not in fact change, the medical risks and side-effects (such as sterilization) will have been borne for no reason. If, however, a child resolves the mental health issues first with the gender dysphoria resolving with it (which the research literature shows to be the case in the large majority), then the child need not undergo transition at all, but yet still retains the opportunity to do so later.

71. Elevated rates of multiple mental health issues among gender dysphoric children are reported throughout the research literature. A formal analysis of children (ages 4–11) undergoing assessment at the Dutch child gender clinic showed 52% fulfilled criteria for a DSM axis-I disorder.⁶⁴ A comparison of the children attending the Canadian versus Dutch child gender dysphoria clinic showed only few differences between them, but a large proportion in both groups were diagnosable with clinically significant mental health issues. Results of standard assessment instruments (Child Behavior Check List, or CBCL) demonstrated that the average score was in the clinical rather than healthy range, among children in both clinics.⁶⁵ When expressed as percentages, among 6–11-year-olds, 61.7% of the Canadian and 62.1% of the Dutch sample were in the clinical range.

72. A systematic, comprehensive review of all studies of Autism Spectrum Disorders (ASDs) and Attention-Deficit Hyperactivity Disorder (ADHD) among children diagnosed with gender dysphoria was recently conducted. It was able to identify a total of 22 studies examining the prevalence of ASD or ADHD in youth with gender dysphoria. Studies reviewing medical records of children and adolescents referred to gender clinics showed 5–26% to have been diagnosed with ASD.⁶⁶

⁶⁴ Wallien, *et al.*, 2007.

⁶⁵ Cohen-Kettenis, *et al.*, 2003, at 46.

⁶⁶ Thrower, *et al.*, 2020.

Moreover, those authors gave specific caution on the “considerable overlap between symptoms of ASD and symptoms of gender variance, exemplified by the subthreshold group which may display symptoms which could be interpreted as either ASD or gender variance. Overlap between symptoms of ASD and symptoms of GD may well confound results.”⁶⁷ When two or more issues are present at the same time (in this case, gender dysphoria present at the same time as ADHD or ASD), researchers cannot distinguish when a result is associated with or caused by the issue of interest (gender dysphoria itself) or one of the side issues, called *confounds* (ADHD or ASD, in the present case).⁶⁸ The rate of ADHD among children with GD was 8.3–11%. Conversely, in data from children (ages 6–18) with Autism Spectrum Disorders (ASDs) show they are more than seven times more likely to have parent-reported “gender variance.”⁶⁹

C. Adolescent-Onset Gender Dysphoria

1. Features of Adolescent-Onset Gender Dysphoria

73. A third profile has begun to present to clinicians or socially, characteristically distinct from the previously identified ones.⁷⁰ Unlike adult-onset gender dysphoria (and also unlike childhood-onset, *see supra* Part IV.B.2), this group is predominately biologically female. This group first presents in adolescence, but lacks the history of cross-gender behavior in childhood like the childhood-onset cases have. It is this feature which led to the term Rapid Onset Gender Dysphoria (ROGD).⁷¹ The majority of cases appear to occur within clusters of peers and in association with increased social media use⁷² and especially among people with autism or other neurodevelopmental or mental health issues.⁷³

⁶⁷ Thrower, *et al.*, 2020, at 703.

⁶⁸ Cohen-Kettenis *et al.*, 2003, at 51; Skelly *et al.*, 2012.

⁶⁹ Janssen, *et al.*, 2016.

⁷⁰ Kaltiala-Heino, *et al.*, 2015; Littman, 2018.

⁷¹ Littman, 2018.

⁷² Littman, 2018.

⁷³ Kaltiala-Heino, *et al.*, 2015; Littman, 2018; Warrier, *et al.*, 2020.

74. It cannot be easily determined whether the self-reported gender dysphoria is a result of other underlying issues or if those mental health issues are the result of the stresses of being a stigmatized minority, as some writers are quick to assume.⁷⁴ *See infra* Part VI.E (discussing the minority stress hypothesis). Importantly, and unlike other presentations of gender dysphoria, people with rapid-onset gender dysphoria often (47.2%) experienced *declines* rather than improvements in mental health when they publicly acknowledged their gender status.⁷⁵ Although long-term outcomes have not yet been reported, these distinctions argue against generalizing findings from the other types of gender dysphoria to this one. That is, in the absence of evidence, researchers cannot assume that the pattern found in childhood-onset or adult-onset gender dysphoria also applies to rapid-onset (aka adolescent-onset) gender dysphoria. That is, the group differences already observed argue against the conclusion that any given feature would be present, in general, throughout all types of gender dysphoria.

2. Prospective Studies of Social Transition and Puberty Blockers in Adolescence

75. There do not yet exist prospective outcomes studies either for social transition or for medical interventions for people whose gender dysphoria began in adolescence. That is, instead of taking a sample of individuals and following them forward over time (thus permitting researchers to account for people dropping out of the study, people misremembering the order of events, etc.), all studies have thus far been *retrospective*. It is not possible for such studies to identify what factors caused what outcomes. No study has yet been organized in such a way as to allow for an analysis of the adolescent-onset group, as distinct from childhood-onset or adult-onset cases. Many of the newer clinics (not the original clinics systematically tracking and reporting on their case results) fail to distinguish between people who had childhood-

⁷⁴ Boivin, *et al.*, 2020.

⁷⁵ Biggs, 2020; Littman, 2018.

onset gender dysphoria and have aged into adolescence and people whose onset was not until adolescence. Similarly, there are clinics failing to distinguish people who had adolescent-onset gender dysphoria and aged into adulthood from adult-onset gender dysphoria. Studies selecting groups according to their current age instead of their ages of onset can produce only confounded results, representing unclear mixes according to how many of each type of case wound up in the final sample.

3. Mental Illness in Adolescent-Onset Gender Dysphoria

76. In 2019, a Special Section of the *Archives of Sexual Behavior* was published: “Clinical Approaches to Adolescents with Gender Dysphoria.” It included this brief yet thorough summary of rates of mental health issues among adolescents expressing gender dysphoria by Dr. Aron Janssen of the Department of Child and Adolescent Psychiatry of New York University.⁷⁶ The literature varies in the range of percentages of adolescents with co-occurring disorders. The range for depressive symptoms ranges was 6–42%,⁷⁷ with suicide attempts ranging 10 to 45%.⁷⁸ Self-injurious thoughts and behaviors range 14–39%.⁷⁹ Anxiety disorders and disruptive behavior difficulties including Attention Deficit/Hyperactivity Disorder are also prevalent.⁸⁰ Gender dysphoria also overlaps with Autism Spectrum Disorder.⁸¹

77. Of particular concern in the context of adolescent onset gender dysphoria is *Borderline Personality Disorder* (BPD). The DSM criteria for BPD are:

A pervasive pattern of instability of interpersonal relationships, self-image, and affects, and marked impulsivity beginning by early adulthood and present in a variety of contexts, as indicated by five (or more) of the following:

1. Frantic efforts to avoid real or imagined abandonment. (Note: Do not include suicidal or self-mutilating behaviour covered in Criterion 5.)

⁷⁶ Janssen, *et al.*, 2019.

⁷⁷ Holt, *et al.*, 2016; Skagerberg, *et al.*, 2013; Wallien, *et al.*, 2007.

⁷⁸ Reisner, *et al.*, 2015.

⁷⁹ Holt, *et al.*, 2016; Skagerberg, *et al.*, 2013.

⁸⁰ de Vries, *et al.*, 2011; Mustanski, *et al.*, 2010; Wallien, *et al.*, 2007.

⁸¹ de Vries, *et al.*, 2010; Jacobs, *et al.*, 2014; Janssen, *et al.*, 2016; May, *et al.*, 2016; Strang, *et al.*, 2014, 2016.

2. A pattern of unstable and intense interpersonal relationship characterized by alternating between extremes of idealization and devaluation.
3. *Identity disturbance: markedly and persistently unstable self-image or sense of self.*
4. Impulsivity in at least two areas that are potentially self-damaging (e.g., spending, sex, substance abuse, reckless driving, binge eating). (Note: Do not include suicidal or self-mutilating behavior covered in Criterion 5.)
5. *Recurrent suicidal behaviour, gestures, or threats, or self-mutilating behavior.*
6. Affective instability due to a marked reactivity of mood (e.g., intense episodic dysphoria, irritability, or anxiety usually lasting a few hours and only rarely more than a few days).
7. Chronic feelings of emptiness.
8. Inappropriate, intense anger or difficulty controlling anger (e.g., frequent displays of temper, constant anger, recurrent physical fights).
9. Transient, stress-related paranoid ideation or severe dissociative symptoms.

(Italics added.)

78. It is increasingly hypothesized that very many cases appearing to be adolescent-onset gender dysphoria are actually cases of BPD.⁸² That is, some people may be misinterpreting their experiences to represent a gender identity issue, when it instead represents the “identity disturbance” noted in symptom Criterion 3. Like adolescent-onset gender dysphoria, BPD begins to manifest in adolescence, is substantially more common among biological females than males, and occurs in 2–3% of the population, rather than 1-in-5,000 people (*i.e.*, 0.02%). Thus, if even only a portion of people with BPD had an ‘identity disturbance’ that focused on gender identity and were mistaken for transgender, they could easily overwhelm the number of genuine cases of gender dysphoria.

79. A primary cause for concern is symptom Criterion 5: recurrent suicidality. Regarding the provision of mental health care, this is a crucial distinction: A person with BPD going undiagnosed will not receive the appropriate treatments (the

⁸² *E.g.*, Zucker, 2019.

currently most effective of which is Dialectical Behavior Therapy). A person with a cross-gender identity would be expected to feel relief from medical transition, but someone with BPD would not: The problem was not about *gender* identity, but about having an *unstable* identity. Moreover, after a failure of medical transition to provide relief, one would predict for these people increased levels of hopelessness and increased risk of suicidality. One would predict also that misdiagnoses would occur more often if one reflexively dismissed or discounted symptoms of BPD as responses to “minority stress.” *See infra* Part VI.D (discussing minority stress).

80. Regarding research, there have now been several attempts to document rates of suicidality among gender dysphoric adolescents. *See infra* Part VI.C. The scientific concern presented by BPD is that it poses a potential confound: samples of gender dysphoric adolescents could appear to have elevated rates of suicidality, not because of the gender dysphoria (or transphobia in society), but because of the number of people with BPD in the sample.

VI. Alleged Scientific Claims Assessed

A. Conversion Therapy

81. Activists and social media increasingly, but erroneously, apply the term “conversion therapy” moving farther and farther from what the research has reported. “Conversion therapy” (or “reparative therapy” and other names) was the attempt to change a person’s sexual orientation; however, with the public more frequently accustomed to “LGB” being expanded to “LGBTQ+”, the claims relevant only to sexual orientation are being misapplied to gender identity. The research has repeatedly demonstrated that once one explicitly acknowledges being gay or lesbian, this is only rarely mistaken. That is entirely unlike gender identity, wherein the great majority of children who declare cross-gender identity cease to do so by puberty, as shown unanimously by every follow-up study ever published. As the field grows increasingly polarized, any therapy failing to provide affirmation-on-demand is

misabeled “conversion therapy.”⁸³ Indeed, even actions of non-therapists, unrelated to any therapy have been labelled conversion therapy, including the very prohibition of biological males competing on female teams.⁸⁴

B. Claims that All Childhood Outcome Studies Are Wrong

82. As already indicated, the follow-up studies of gender dysphoric children are unanimous in their conclusion that gender dysphoria desists in the large majority of cases. Nonetheless, some authors assert that the entire set of prospective outcomes studies on prepubescent children is wrong; that desistance is not, in fact, the usual outcome for gender dysphoric children; and that results from various retrospective studies are the more accurate picture.⁸⁵ As indicated in the responses published from authors of several prospective outcomes studies (and as summarized below), the detractors’ arguments are invalid.⁸⁶

83. There have been accusations that some of the prospective outcome studies are old. This criticism would be valid only if newer studies showed different results from the older studies; however, the findings of desistance are the same, indicating that age of the studies is not, in fact, a factor.

84. There have been accusations that some studies failed to use a DSM diagnosis, and should therefore be rejected. That would be a valid criticism only if studies using the DSM showed different results from studies not using the DSM. Because both kinds of studies showed the same results, one may conclude that DSM status was not a factor, even if using a DSM diagnosis would have been a preferred method.

⁸³ D’Angelo, R., Syrulnik, E., Ayad, S., Marchiano, L., Kenny, D. T., & Clarke, P. (2021). One size does not fit all: In support of psychotherapy for gender dysphoria. *Archives of Sexual Behavior*, 50, 7–16.

⁸⁴ Turban, J. (2021, March 16). Trans girls belong on girls’ sports teams. *Scientific American*.

www.scientificamerican.com/article/trans-girls-belong-on-girls-sports-teams/

⁸⁵ Temple Newhook, *et al.*, 2018; Winters, *et al.*, 2018.

⁸⁶ Steensma, *et al.*, 2018a; Zucker, *et al.* 2018.

85. There have been criticisms that some studies are too small to provide a reliable result. It is indeed true that if larger studies showed different results from the smaller studies, we would tend to favor the results of the larger studies. Because the smaller studies came to the same conclusion as the larger studies, however, the criticism is, once again, entirely moot.

86. There have been accusations that studies did not use the current DSM-5 as their method of diagnosing gender dysphoric children. This criticism would be valid only if there existed any studies using the DSM-5 against which to compare the existing studies. The DSM-5 is still too recent for there yet to have been long-term follow-up studies. It can be seen, however, that the outcome studies are the same across the DSM-III, DSM-III-R, DSM-IV, and DSM-IV-TR.

87. In science, there cannot be any such thing as a perfect study. Especially in medical research, where we cannot manipulate people in ways that would clear up difficult questions, all studies will have a fault. In science, we do not, however, reject every study with any identifiable short-coming—rather, we gather a diversity of observations, made with their diversity of compromises to safety and ethics (and time and cost, etc.), and tentatively accept the most parsimonious (simplest) explanation of the full set, weighting each study according to their individual strengths and weaknesses.

C. Assessing Claims of Suicidality

88. In the absence of scientific evidence associating improvement with transition among youth, demands for transition are increasingly accompanied by hyperbolic warnings of suicide should there be delay or obstacle to affirmation-on-demand. Social media circulate claims of extreme suicidality accompanied by declarations that “I’d rather have a trans daughter than a dead son.” Such claims convey only grossly misleading misrepresentations of the research literature, however.

89. Despite that the media treat them as near synonyms, suicide and suicidality are distinct phenomena. They represent different behaviors with different motivations, with different mental health issues, and with differing clinical needs. *Suicide* refers to completed suicides and the sincere intent to die. It is substantially associated with impulsivity, using more lethal means, and being a biological male.⁸⁷ *Suicidality* refers to parasuicidal behaviors, including suicidal ideation, threats, and gestures. These typically represent cries for help rather than an intent to die and are more common among biological females. Suicidal threats can indicate any of many problems or represent emotional blackmail, as typified in “If you leave me, I will kill myself.” Professing suicidality is also used for attention- seeking or for the support or sympathy it evokes from others, indicating distress much more frequently than an intent to die.

90. The scientific study of suicide is inextricably linked to that of mental illness. For example, as noted in the preceding, suicidality is a well-documented symptom of Borderline Personality Disorder (as are chronic identity issues), and personality disorders are highly elevated among transgender populations, especially adolescent-onset. Thus, the elevations of suicidality among gender dysphoric adolescents may not be a result of anything related to transition (or lack of transition), but to the overlap with mental illness of which suicidality is a substantial part. Conversely, improvements in suicidality reported in some studies may not be the result of anything related to transition, but rather to the concurrent general mental health support which is reported by the clinical reported prospective outcomes. Studies that include more than one factor at the same time without accounting for each other represent a “confound,” and it cannot be known which factor (or both) is the one causing the effects observed. That is, when a study provides both mental health

⁸⁷ Freeman, *et al.*, 2017.

services and medical transition services at the same time, it cannot be known which (or both) is what caused any changes.

91. A primary criterion for readiness for transition used by the clinics demonstrating successful transition is the absence or resolution of other mental health concerns, such as suicidality. In the popular media, however, indications of mental health concerns are instead often dismissed as an expectable result caused by Sexual Minority Stress (SMS). It is generally implied that such symptoms will resolve upon transition and integration into an affirming environment. Dr. Adkins makes it explicit in her report that the purpose of “the medical treatment for gender dysphoria is to eliminate the clinically significant distress.” (Adkins, p. 5.)

92. Despite that relevant professional association statements repeatedly call for mental health issues, including suicidality, to be resolved before transition (see *infra* Section VI), threats of suicide are instead oftentimes used as the very justification for labelling transition a ‘medical necessity’. However plausible it might seem that failing to affirm transition causes suicidality, the epidemiological evidence indicates that hypothesis to be incorrect: Suicide rates remains elevated even after complete transition, as shown by a comprehensive review of 19 studies of suicidality in gender dysphoria.⁸⁸

93. Of particular relevance in the present context is suicidality as a well-documented symptom of Borderline Personality Disorder (BPD) and that very many cases appearing to be adolescent-onset gender dysphoria actually represent cases of BPD. [See full DSM-5 criteria already listed herein.] That is, some people may be misinterpreting their experiencing of the broader “identity disturbance” of symptom Criterion 3 to represent a gender identity issue specifically. Like adolescent-onset gender dysphoria, BPD begins to manifest in adolescence and occurs in 2–3% of the

⁸⁸ McNeil, et al., 2017.

population, rather than 1-in-5,000 people. (Thus, if even only a portion of people with BPD experienced an identity disturbance that focused on gender identity and were mistaken for transgender, they could easily overwhelm the number of genuine cases of gender dysphoria.)

94. Rates of completed suicide are elevated among post-transition transsexuals, but are nonetheless rare,⁸⁹ and BPD is repeatedly documented to be greatly elevated among sexual minorities⁹⁰. Overall, rates of suicidal ideation and suicidal attempts appear to be related—not to transition status—but to the social support received: The research evidence shows that support decreases suicidality, but that transition itself does not. Indeed, in some situations, social support was associated with increased suicide attempts, suggesting the reported suicidality may represent attempts to evoke more support.⁹¹

D. Assessing Demands for Social Transition and Affirmation-Only or Affirmation-on-Demand Treatment in Pre-Pubertal Children.

95. Colloquially, affirmation refers broadly to any actions that treat the person as belonging to a new gender. In different contexts, that could apply to social actions (use of a new name and pronouns), legal actions (changes to birth certificates), or medical actions (hormonal and surgical interventions). That is, social transition, legal transition, and medical transition (and subparts thereof) need not, and rarely do, occur at the same time. In practice, there are cases in which a child has socially only partially transitioned, such as presenting as one gender at home and another at school or presenting as one gender with one custodial parent and another gender with the other parent.

96. Referring to “affirmation” as a treatment approach is ambiguous: Although often used in public discourse to take advantage of the positive connotations of the

⁸⁹ Wiepjes, *et al.*, 2020.

⁹⁰ Reuter, *et al.*, 2016; Rodriguez-Seiljas, *et al.*, 2021; Zanarni, *et al.*, 2021.

⁹¹ Bauer, *et al.*, 2015; Canetto, *et al.*, 2021.

term, it obfuscates what exactly is being affirmed. This often leads to confusion, such as quoting a study of the benefits and risks of social affirmation in a discussion of medical affirmation, where the appearance of the isolated word “affirmation” refers to entirely different actions.

97. It is also an error to divide treatment approaches into affirmative versus non-affirmative. As noted already, the widely adopted Dutch Approach (and the guidelines of the multiple professional associations based on it) cannot be said to be either: It is a staged set of interventions, wherein social transition (and puberty blocking) may not begin until age 12 and cross-sex hormonal and other medical interventions, later.

98. Formal clinical approaches to helping children expressing gender dysphoria employ a gate-keeper model, with decision trees to help clinicians decide when and if the potential benefits of affirmation of the new gender would outweigh the potential risks of doing so. Because the gate-keepers and decision-trees generally include the possibility of affirmation in at least some cases, it is misleading to refer to any one approach as “the affirmation approach.” The most extreme decision-tree would be accurately called *affirmation-on-demand*, involving little or no opportunity for children to explore at all whether the distress they feel is due to some other, less obvious, factor, whereas more moderate gate-keeping would endorse transition only in select situations, when the likelihood of regretting transition is minimized.

99. Many outcomes studies have been published examining the results of gate-keeper models, but no such studies have been published regarding affirmation-on-demand with children. Although there have been claims that affirmation-on-demand causes mental health or other improvement, these have been the result only of “retrospective” rather than “prospective” studies. That is, such studies did not take a sample of children and follow them up over time, to see how many dropped out altogether, how many transitioned successfully, and how many transitioned and

regretted it or detransitioned. Rather, such studies took a sample of successfully transitioned adults and asked them retrospective questions about their past. In such studies, it is not possible to know how many other people dropped out or regretted transition, and it is not possible to infer causality from any of the correlations detected, despite authors implying and inferring causality.

100. Olson and colleagues employed exactly such a retrospective study. They offered their survey to children in the TransYouth Project—people who have socially transitioned, their families, and any contacts they had, by word of mouth. This method is referred to as “convenience sampling,” and differs from genuinely representative samples in applying to means of ensuring study participants accurately represent the population being studied. There were three groups of children for comparison: (i) children who had already socially transitioned, (ii) their siblings, and (iii) children in a university database of families interested in participating in child development research. As noted by the study authors, “For the first time, this article reports on socially transitioned gender children’s mental health as reported by the children.”⁹² Reports from parents were also recorded.⁹³ In contrast, no reports or ratings were provided by any mental health care professional or researcher at all. That is, although adding self-assessments to the professional assessments might indeed provide novel insights, this project did not add self-assessment to professional assessment. Rather, it replaced professional assessment with self-assessment. Moreover, as already noted, Olson’s data did not show what the Olson team claimed.⁹⁴ The dataset was subsequently re-analyzed, and “[T]o the contrary, the transgender children, even when supported by their parents, had significantly lower average scores on anxiety and self-worth.”⁹⁵

⁹² Durwood, *et al.*, 2017, at 121 (italics added).

⁹³ See Olson, *et al.*, 2016.

⁹⁴ Schumm, *et al.*, 2019.

⁹⁵ Schumm & Crawford, 2020, p. 9

101. It is well established in the field of psychology that participant self-assessment can be severely unreliable for multiple reasons. For example, one well-known phenomenon in psychological research is known as “socially desirable responding”—the tendency of subjects to give answers that they believe will make themselves look good, rather than accurate answers. Specifically, subjects’ reports that they are enjoying good mental health and functioning well could reflect the subjects’ desire to be *perceived* as healthy and as having made good choices, rather than reflecting their actual mental health.

102. In their analyses, the study reported finding no significant differences between the transgender children, their non-transgender siblings, or the community controls. As the authors noted, “[t]hese findings are in striking contrast to previous work with gender-nonconforming children who had not socially transitioned, which found very high rates of depression and anxiety.”⁹⁶ The authors are correct to note that their result contrasts with the previous research, but they do not discuss that this could reflect a problem with the novel research design they used: The subjective self-reports of the children and their parents’ reports may not be reflecting reality objectively, as careful professional researchers would. Because the study did not employ any method to detect and control for participants indulging in “socially desirable responding” or acting under other biasing motivations, this possibility cannot be assessed or ruled out.

103. Because this was a single-time study relying on self-reporting, rather than a before-and-after transition study relying on professional evaluation, it is not possible to know if the children reported as well-functioning are in fact well-functioning, nor if so whether they are well-functioning because they were permitted to transition, or whether instead the fact is that they were already well-functioning

⁹⁶ Durwood, *et al.*, 2017, at 116.

and therefore permitted to transition. Finally, because the TransYouth project lacks a prospective design, it cannot be known how many cases attempted transition, reacted poorly, and then detransitioned, thus never having entered into the study in the first place.

E. Assessing the “Minority Stress Hypothesis”

104. The elevated levels of mental health problems among lesbian, gay, and bisexual populations is a well-documented phenomenon, and the idea that it is caused by living within a socially hostile environment is called the *Minority Stress Hypothesis*.⁹⁷ The association is not entirely straight-forward, however. For example, although lesbian, gay, and bisexual populations are more vulnerable to suicide ideation overall, the evidence specifically on adult lesbian and bisexual women is unclear. Meyer did not include transgender populations in originating the hypothesis, and it remains a legitimate question to what extent and in what ways it might apply to gender identity.

105. Minority stress is associated, in large part, with being a visible minority. There is little evidence that transgender populations show the patterns suggested by the hypothesis. For example, the minority stress hypothesis would predict differences according to how visibly a person is discernable as a member of the minority, which often changes greatly upon transition. Biological males who are very effeminate stand out throughout childhood, but in some cases can successfully blend in as adult females; whereas the adult-onset transitioners blend in very much as heterosexual cis-gendered males during their youth and begin visibly to stand out in adulthood, only for the first time.

106. Also suggesting minority stress cannot be the full story is that the mental health symptoms associated with minority stress do not entirely correspond with

⁹⁷ Meyer, 2003.

those associated with gender dysphoria. The primary symptoms associated with minority stress are depressive symptoms, substance use, and suicidal ideation.⁹⁸ The symptoms associated with gender dysphoria indeed include depressive symptoms and suicidal ideation, but also include anxiety symptoms, Autism Spectrum Disorders, and personality disorders.

VII. Assessing Statements from Professional Associations

A. Understanding the Value of Statements from Professional Associations

107. The value of position statements from professional associations should be neither over- nor under-estimated. In the ideal, an organization of licensed health care professionals would convene a panel of experts who would systematically collect all the available evidence about an issue, synthesizing it into recommendations or enforceable standards for clinical care, according to the quality of the evidence for each alternative. For politically neutral issues, with relevant expertise contained among association members, this ideal can be readily achievable. For controversial issues with no clear consensus, the optimal statement would summarize each perspective and explicate the strengths and weaknesses of each, providing relatively reserved recommendations and suggestions for future research that might resolve the continuing questions. Several obstacles can hinder that goal, however. Committees within professional organizations are typically volunteer activities, subject to the same internal politics of all human social structures. That is, committee members are not necessarily committees of experts on a topic—they are often committees of generalists handling a wide variety of issues or members of an interest group who feel strongly about political implications of an issue, instead of scientists engaged in the objective study of the topic.

⁹⁸ Meyer, 2003.

108. Thus, documents from professional associations may represent required standards, the violation of which may merit sanctions, or may represent only recommendations or guidelines. A document may represent the views of an association's full membership or only of the committee's members (or majorities thereof). Documents may be based on systematic, comprehensive reviews of the available research or selected portions of the research. In sum, the weight best placed on any association's statement is the amount by which that association employed evidence versus other considerations in its process.

B. Misrepresentations of statements of professional associations.

109. In the presently highly politicized context, official statements of professional associations have been widely misrepresented. In preparing the present report, I searched the professional research literature for documentation of statements from these bodies and from my own files, for which I have been collecting such information for many years. I was able to identify statements from six such organizations. Although not strictly a medical association, the World Professional Association for Transgender Health (WPATH) also distributed a set of guidelines in wide use and on which other organizations' guidelines are based.

110. Notably, despite that all these medical associations reiterate the need for mental health issues to be resolved before engaging in medical transition, only the AACAP members have medical training in mental health. The other medical specialties include clinical participation with this population, but their assistance in transition generally assumes the mental health aspects have already been assessed and treated beforehand.

1. World Professional Association for Transgender Health (WPATH)

111. The WPATH standards as they relate to prepubescent children begin with the acknowledgement of the known rates of desistance among gender dysphoric children:

[I]n follow-up studies of prepubertal children (mainly boys) who were referred to clinics for assessment of gender dysphoria, the dysphoria persisted into adulthood for only 6–23% of children (Cohen-Kettenis, 2001; Zucker & Bradley, 1995). Boys in these studies were more likely to identify as gay in adulthood than as transgender (Green, 1987; Money & Russo, 1979; Zucker & Bradley, 1995; Zuger, 1984). Newer studies, also including girls, showed a 12–27% persistence rate of gender dysphoria into adulthood (Drummond, Bradley, Peterson-Badali, & Zucker, 2008; Wallien & Cohen-Kettenis, 2008).⁹⁹

112. That is, “In most children, gender dysphoria will disappear before, or early in, puberty.”¹⁰⁰

113. Although WPATH does not refer to puberty blocking medications as “experimental,” the document indicates the non-routine, or at least inconsistent availability of the treatment:

Among adolescents who are referred to gender identity clinics, the number considered eligible for early medical treatment—starting with GnRH analogues to suppress puberty in the first Tanner stages—differs among countries and centers. Not all clinics offer puberty suppression. If such treatment is offered, the pubertal stage at which adolescents are allowed to start varies from Tanner stage 2 to stage 4 (Delemarre, van de Waal & Cohen-Kettenis, 2006; Zucker et al., [2012]).¹⁰¹

114. WPATH neither endorses nor proscribes social transitions before puberty, instead recognizing the diversity among families’ decisions:

Social transitions in early childhood do occur within some families with early success. This is a controversial issue, and divergent views are held by health professionals. The current evidence base is insufficient to predict the long-term outcomes of completing a gender role transition during early childhood.¹⁰²

115. It does caution, however, “Relevant in this respect are the previously described relatively low persistence rates of childhood gender dysphoria.”¹⁰³

⁹⁹ Coleman, *et al.*, 2012, at 172.

¹⁰⁰ Coleman, *et al.*, 2012, at 173.

¹⁰¹ Coleman, *et al.*, 2012, at 173.

¹⁰² Coleman, *et al.*, 2012, at 176.

¹⁰³ Coleman, *et al.*, 2012, at 176 (quoting Drummond, *et al.*, 2008; Wallien & Cohen-Kettenis, 2008).

2. Endocrine Society (ES)

116. The 150,000-member Endocrine Society appointed a nine-member task force, plus a methodologist and a medical writer, who commissioned two systematic reviews of the research literature and, in 2017, published an update of their 2009 recommendations, based on the best available evidence identified. The guideline was co-sponsored by the American Association of Clinical Endocrinologists, American Society of Andrology, European Society for Paediatric Endocrinology, European Society of Endocrinology, Pediatric Endocrine Society (PES), and the World Professional Association for Transgender Health (WPATH).

117. The document acknowledged the frequency of desistance among gender dysphoric children:

Prospective follow-up studies show that childhood GD/gender incongruence does not invariably persist into adolescence and adulthood (so-called “desisters”). Combining all outcome studies to date, the GD/gender incongruence of a minority of prepubertal children appears to persist in adolescence. . . . In adolescence, a significant number of these desisters identify as homosexual or bisexual.¹⁰⁴

118. The statement similarly acknowledges inability to predict desistance or persistence, “With current knowledge, we cannot predict the psychosexual outcome for any specific child.”¹⁰⁵

119. Although outside their area of professional expertise, mental health issues were also addressed by the Endocrine Society, repeating the need to handle such issues before engaging in transition, “In cases in which severe psychopathology, circumstances, or both seriously interfere with the diagnostic work or make satisfactory treatment unlikely, clinicians should assist the adolescent in managing these other issues.”¹⁰⁶ This ordering—to address mental health issues before embarking on transition—avoids relying on the unproven belief that transition will solve such issues.

¹⁰⁴ Hembree, *et al.*, 2017, at 3876.

¹⁰⁵ Hembree, *et al.*, 2017, at 3876.

¹⁰⁶ Hembree, *et al.*, 2017, at 3877.

120. The Endocrine Society did not endorse any affirmation-only approach. The guidelines were neutral with regard to social transitions before puberty, instead advising that such decisions be made only under clinical supervision: “We advise that decisions regarding the social transition of prepubertal youth are made with the assistance of a mental health professional or similarly experienced professional.”¹⁰⁷

121. The Endocrine Society guidelines make explicit that, after gathering information from adolescent clients seeking medical interventions and their parents, the clinician “provides correct information to prevent unrealistically high expectations [and] assesses whether medical interventions may result in unfavorable psychological and social outcomes.”¹⁰⁸

3. Pediatric Endocrine Society and Endocrine Society (ES/PES)

122. In 2020, the 1500-member Pediatric Endocrine Society partnered with the Endocrine Society to create and endorse a brief, two-page position statement.¹⁰⁹ Although strongly worded, the document provided no specific guidelines, instead deferring to the Endocrine Society guidelines.¹¹⁰

123. It is not clear to what extent this endorsement is meaningful, however. According to the PES, the Endocrine Society “recommendations include evidence that treatment of gender dysphoria/gender incongruence is medically necessary and should be covered by insurance.”¹¹¹ However, the Endocrine Society makes neither statement. Although the two-page PES document mentioned insurance coverage four times, the only mention of health insurance by the Endocrine Society was: “If GnRH analog treatment is not available (insurance denial, prohibitive cost, or other reasons), postpubertal, transgender female adolescents may be treated with an

¹⁰⁷ Hembree, *et al.*, 2017, at 3872.

¹⁰⁸ Hembree, *et al.*, 2017, at 3877.

¹⁰⁹ PES, online; Pediatric Endocrine Society & Endocrine Society, Dec. 2020.

¹¹⁰ Pediatric Endocrine Society & Endocrine Society, Dec. 2020, at 1; Hembree, *et al.*, 2017.

¹¹¹ Pediatric Endocrine Society & Endocrine Society, Dec. 2020, at 1.

antiandrogen that directly suppresses androgen synthesis or action.”¹¹² Despite the PES asserting it as “medically necessary,” the Endocrine Society stopped short of that. Its only use of that phrase was instead limiting: “We recommend that a patient pursue genital gender-affirming surgery only after the MHP and the clinician responsible for endocrine transition therapy both agree that surgery is medically necessary and would benefit the patient’s overall health and/or well-being.”¹¹³

4. American Academy of Child & Adolescent Psychiatry (AACAP)

124. The 2012 statement of the American Academy of Child & Adolescent Psychiatry (AACAP) is not an affirmation-only policy. It notes:

Just as family rejection is associated with problems such as depression, suicidality, and substance abuse in gay youth, the proposed benefits of treatment to eliminate gender discordance in youth must be carefully weighed against such possible deleterious effects. . . . In general, it is desirable to help adolescents who may be experiencing gender distress and dysphoria to defer sex reassignment until adulthood, or at least until the wish to change sex is unequivocal, consistent, and made with appropriate consent.¹¹⁴

125. The AACAP’s language repeats the description of the use of puberty blockers only as an exception: “For situations in which deferral of sex reassignment decisions until adulthood is *not clinically feasible*, one approach that has been described in case series is sex hormone suppression under endocrinological management with psychiatric consultation using gonadotropin-releasing hormone analogues.”¹¹⁵

126. The AACAP statement acknowledges the long-term outcomes literature for gender dysphoric children: “In follow-up studies of prepubertal boys with gender discordance—including many without any mental health treatment—the cross gender wishes usually fade over time and do not persist into adulthood,”¹¹⁶ adding that “[c]linicians should be aware of current evidence on the natural course of gender

¹¹² Hembree, *et al.* 2017, at 3883.

¹¹³ Hembree, *et al.*, 2017 at 3872, 3894.

¹¹⁴ Adelson & AACAP, 2012, at 969.

¹¹⁵ Adelson & AACAP, 2012, at 969 (*italics added*).

¹¹⁶ Adelson & AACAP, 2012, at 963.

discordance and associated psychopathology in children and adolescents in choosing the treatment goals and modality.”¹¹⁷

127. The policy similarly includes a provision for resolving mental health issues: “Gender reassignment services are available in conjunction with mental health services focusing on exploration of gender identity, cross-sex treatment wishes, counseling during such treatment if any, and *treatment of associated mental health problems*.”¹¹⁸ The document also includes minority stress issues and the need to deal with mental health aspects of minority status (*e.g.*, bullying).¹¹⁹

128. Rather than endorse social transition for prepubertal children, the AACAP indicates: “There is similarly no data at present from controlled studies to guide clinical decisions regarding the risks and benefits of sending gender discordant children to school in their desired gender. Such decisions must be made based on clinical judgment, bearing in mind the potential risks and benefits of doing so.”¹²⁰

5. American College of Obstetricians & Gynecologists (ACOG)

129. The American College of Obstetricians & Gynecologists (ACOG) published a “Committee Opinion” expressing recommendations in 2017. The statement indicates it was developed by the ACOG’s Committee on Adolescent Health Care, but does not indicate participation based on professional expertise or a systematic method of objectively assessing the existing research. It includes the disclaimer: “This document reflects emerging clinical and scientific advances as of the date issued and is subject to change. The information should not be construed as dictating an exclusive course of treatment or procedure to be followed.”¹²¹

¹¹⁷ Adelson & AACAP, 2012, at 968.

¹¹⁸ Adelson & AACAP, 2012, at 970 (*italics added*).

¹¹⁹ Adelson & AACAP, 2012, at 969.

¹²⁰ Adelson & AACAP, 2012, at 969.

¹²¹ ACOG, 2017, at 1.

130. Prepubertal children do not typically have clinical contact with gynecologists, and the ACOG recommendations include that the client additionally have a primary health care provider.¹²²

131. The ACOG statement cites the statements made by other medical associations—European Society for Pediatric Endocrinology (ESPE), PES, and the Endocrine Society—and by WPATH.¹²³ It does not cite any professional association of *mental* health care providers, however. The ACOG recommendations repeat the previously mentioned eligibility/readiness criteria of having no mental illness that would hamper diagnosis and no medical contraindications to treatment. It notes: “*Before* any treatment is undertaken, the patient must display eligibility and readiness (Table 1), meaning that the adolescent has been evaluated by a mental health professional, has no contraindications to therapy, and displays an understanding of the risks involved.”¹²⁴

132. The “Eligibility and Readiness Criteria” also include, “Diagnosis established for gender dysphoria, transgender, transsexualism.”¹²⁵ This standard, requiring a formal diagnosis, forestalls affirmation-on-demand because self-declared self-identification is not sufficient for DSM diagnosis.

133. ACOG’s remaining recommendations pertain only to post-transition, medically oriented concerns. Pre-pubertal social transition is not mentioned in the document, and the outcomes studies of gender dysphoric (prepubescent) children are not cited.

6. American College of Physicians (ACP)

134. The American College of Physicians published a position paper broadly expressing support for the treatment of LGBT patients and their families, including

¹²² ACOG, 2017, at 1.

¹²³ ACOG, 2017, at 1, 3.

¹²⁴ ACOG, 2017, at 1, 3 (citing the Endocrine Society guidelines) (*italics added*).

¹²⁵ ACOG, 2017, at 3 Table 1.

nondiscrimination, antiharassment, and defining “family” by emotional rather than biological or legal relationships in visitation policies, and the inclusion of transgender health care services in public and private health benefit plans.¹²⁶

135. ACP did not provide guidelines or standards for child or adult gender transitions. The policy paper opposed attempting “reparative therapy;” however, the paper confabulated sexual orientation with gender identity in doing so. That is, on the one hand, ACP explicitly recognized that “[s]exual orientation and gender identity are inherently different.”¹²⁷ It based this statement on the fact that “the American Psychological Association conducted a literature review of 83 studies on the efficacy of efforts to change *sexual orientation*.”¹²⁸ The APA’s document, entitled “Report of the American Psychological Task Force on appropriate therapeutic responses to *sexual orientation*” does not include or reference research on gender identity.¹²⁹ Despite citing no research about transgenderism, the ACP nonetheless included in its statement: “Available research does not support the use of reparative therapy as an effective method in the treatment of LGBT persons.”¹³⁰ That is, the inclusion of “T” with “LGB” is based on something other than the existing evidence.

136. There is another statement,¹³¹ which was funded by ACP and published in the Annals of Internal Medicine under its “*In the Clinic*” feature, noting that “‘In the Clinic’ does not necessarily represent official ACP clinical policy.”¹³² The document discusses medical transition procedures for adults rather than for children, except to note that “[n]o medical intervention is indicated for prepubescent youth,”¹³³ that a “mental health provider can assist the child and family with identifying an

¹²⁶ Daniel & Butkus, 2015a, 2015b.

¹²⁷ Daniel & Butkus, 2015b, at 2.

¹²⁸ Daniel & Butkus, 2015b, at 8 (*italics added*).

¹²⁹ APA, 2009 (*italics added*).

¹³⁰ Daniel & Butkus, 2015b, at 8 (*italics added*).

¹³¹ Safer & Tangpricha, 2019.

¹³² Safer & Tangpricha, 2019, at ITC1.

¹³³ Safer & Tangpricha, 2019, at ITC9.

appropriate time for a social transition,”¹³⁴ and that the “child should be assessed and managed for coexisting mood disorders during this period because risk for suicide is higher than in their cisgender peers.”¹³⁵

7. American Academy of Pediatrics (AAP)

137. The policy of the American Academy of Pediatrics (AAP) is unique among the major medical associations in being the only one to endorse an affirmation-on-demand policy, including social transition before puberty without any watchful waiting period. Although changes in recommendations can obviously be appropriate in response to new research evidence, the AAP provided none. Rather, the research studies AAP cited in support of its policy simply did not say what AAP claimed they did. In fact, the references that AAP cited as the basis of their policy instead outright contradicted that policy, repeatedly endorsing watchful waiting.¹³⁶ Moreover, of all the outcomes research published, the AAP policy cited *one*, and that without mentioning the outcome data it contained.¹³⁷

8. The ESPE-LWPES GnRH Analogs Consensus Conference Group

138. Included in the interest of completeness, there was also a collaborative report in 2009, between the European Society for Pediatric Endocrinology (ESPE) and the Lawson Wilkins Pediatric Endocrine Society (LWPES).¹³⁸ Thirty experts were convened, evenly divided between North American and European labs and evenly divided male/female, who comprehensively rated the research literature on gonadotropin-release hormone analogs in children.

139. The effort concluded that “[u]se of gonadotropin-releasing hormone analogs for conditions other than central precocious puberty requires additional investigation

¹³⁴ Safer & Tangpricha, 2019, at ITC9.

¹³⁵ Safer & Tangpricha, 2019, at ITC9.

¹³⁶ Cantor, 2020.

¹³⁷ Cantor, 2020, at 1.

¹³⁸ Carel et al., 2009.

and cannot be suggested routinely.”¹³⁹ However, gender dysphoria was not explicitly mentioned as one of those other conditions.

¹³⁹ Carel et al. 2009, at 752.

References

- Achille, C., Taggart, T., Eaton, N. R., Osipoff, J., Tafuri, K., Lane, A., & Wilson, T. A. (2020). Longitudinal impact of gender-affirming endocrine intervention on the mental health and well-being of transgender youths: Preliminary results. *International Journal of Pediatric Endocrinology*. doi: 10.1186/s13633-020-00078-2
- Adelson, S. L., & American Academy of Child and Adolescent Psychiatry (AACAP) Committee on Quality Issues. (2012). Practice parameter on gay, lesbian, or bisexual sexual orientation, gender nonconformity, and gender discordance in children and adolescents. *Journal of the American Academy of Child & Adolescent Psychiatry*, 51, 957–974.
- American College of Obstetricians and Gynecologists. (2017). Care for transgender Adolescents. Committee Opinion No. 685. Retrieved from www.acog.org/clinical/clinical-guidance/committee-opinion/articles/2017/01/care-for-transgender-adolescents
- American Psychological Association, Task Force on Appropriate Therapeutic Responses to Sexual Orientation. (2009). Report of the American Psychological Association Task Force on Appropriate Therapeutic Responses to Sexual Orientation. Retrieved from <http://www.apa.org/pi/lgbc/publications/therapeutic-resp.html>
- Anzani, A., De Panfilis, C., Scandurra, C., & Prunas, A. (2020). Personality Disorders and Personality Profiles in a Sample of Transgender Individuals Requesting Gender-Affirming Treatments. *International Journal of Environmental Research and Public Health*, 27, 17, 1521. www.ncbi.nlm.nih.gov/pmc/articles/PMC7084367/
- Bancroft, J. (2009). *Human sexuality and its problems* (3rd ed.). New York: Elsevier.
- Bauer, G. R., Scheim, A. I., Pyne, J., Travers, R., & Hammond, R. (2015). Intervenable factors associated with suicide risk in transgender persons: A respondent driven sampling study in Ontario, Canada. *BMC Public Health*, 15, 525.
- Biggs, M. (2019). A letter to the editor regarding the original article by Costa et al: Psychological support, puberty suppression, and psychosocial functioning in adolescents with gender dysphoria. *Journal of Sexual Medicine*, 16, 2043.
- Biggs, M. (2020). Gender dysphoria and psychological functioning in adolescents treated with GnRHa: Comparing Dutch and English prospective studies. *Archives of Sexual Behavior*, 49, 2231–2236.
- Blanchard, R. (1985). Typology of male-to-female transsexualism. *Archives of Sexual Behavior*, 14, 247–261.
- Blanchard, R. (1988). Nonhomosexual gender dysphoria. *The Journal of Sex Research*, 24, 188–193.
- Blanchard, R. (1989a). The classification and labeling of nonhomosexual gender dysphorias. *Archives of Sexual Behavior*, 18, 315–334.

- Blanchard, R. (1989b). The concept of autogynephilia and the typology of male gender dysphoria. *Journal of Nervous and Mental Disease*, 177, 616–623.
- Blanchard, R. (1990). Gender identity disorders in adult women. In R. Blanchard & B. W. Steiner (Eds.), *Clinical management of gender identity disorders in children and adults* (pp. 77–91). Washington, DC: American Psychiatric Press.
- Blanchard, R. (1991). Clinical observations and systematic studies of autogynephilia. *Journal of Sex and Marital Therapy*, 17, 235–251.
- Blanchard, R., Steiner, B. W., Clemmensen, L. H., & Dickey, R. (1989). Prediction of regrets in postoperative transsexuals. *Canadian Journal of Psychiatry*, 34, 43–45.
- Bränström, R., & Pachankis, J. E. (2019). Reduction in mental health treatment utilization among transgender individuals after gender-affirming surgeries: A total population study. *American Journal of Psychiatry*, 177, 727–734.
- Boivin, L., Notredame, C.-E., Jardri, R., & Medjkane, F. (2020). Supporting parents of transgender adolescents: Yes, but how? *Archives of Sexual Behavior*, 49, 81–83.
- Cantor, J. M. (2020). Transgender and gender diverse children and adolescents: Fact-checking of AAP policy. *Journal of Sex & Marital Therapy*, 46, 307–313.
- Canetto, S. S., Antonelli, P., Ciccotti, A., Dettore, D., & Lamis, D. A. (2021). Suicidal as normal: A lesbian, gay, and bisexual youth script? *Crisis*, 42, 292–300.
- Carel, J. C., Eugster, E. A., Rogol, A., Ghizzoni, L., Palmert, M. R.; ESPE-LWPES GnRH Analogs Consensus Conference Group, Antoniazzi, F., Berenbaum, S., Bourguignon, J. P., Chrousos, G. P., Coste, J., Deal, S., de Vries, L., Foster, C., Heger, S., Holland, J., Jahnukainen, K., Juul, A., Kaplowitz, P., Lahlou, N., Lee, M. M., Lee, P., Merke, D. P., Neely, E. K., Oostdijk, W., Phillip, M., Rosenfield, R. L., Shulman, D., Styne, D., Tauber, M., Wit, J. M. (2009). Consensus statement on the use of gonadotropin-releasing hormone analogs in children. *Pediatrics*, 123(4), e752–e762.
- Cohen, J., Cohen, P., West, S. G. Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences* (3rd ed.). Mahwah, NJ: Lawrence Erlbaum Associates.
- Carmichael, P., Butler, G., Masic, U., Cole, T. J., De Stavola, B. L., Davidson, S., Skageberg, E. M., Khadr, S., Viner, R. M. (2021). Short-term outcomes of pubertal suppression in a selected cohort of 12 to 15 year old young people with persistent gender dysphoria in the UK. *PLoS ONE*, 16(2): e0243894.
- Cohen-Kettenis, P. T. (2001). Gender identity disorder in DSM? *Journal of the American Academy of Child & Adolescent Psychiatry*, 40, 391–391.
- Cohen-Kettenis, P. T., Owen, A., Kaijser, V. G., Bradley, S. J., & Zucker, K. J. (2003). Demographic characteristics, social competence, and behavior problems in children with gender identity disorder: A cross-national, cross-clinic comparative analysis. *Journal of Abnormal Child Psychology*, 31, 41–53.
- Coleman, E., Bockting, W., Botzer, M., Cohen-Kettenis, P., DeCuypere, G., Feldman, J., Fraser, L., Green, J., Knudson, G., Meyer, W. J., Monstrey, S., Adler, R. K.,

- Brown, G. R., Devor, A. H., Ehrbar, R., Ettner, R., Eyler, E., Garofalo, R., Karasic, D. H., Lev, A. I., Mayer, G., Meyer-Bahlburg, H., Hall, B. P., Pfaefflin, F., Rachlin, K., Robinson, B., Schechter, L. S., Tangpricha, V., van Trotsenburg, M., Vitale, A., Winter, S., Whittle, S., Wylie, K. R., & Zucker, K. (2012). Standards of care for the health of transsexual, transgender, and gender-nonconforming people, version 7. *International Journal of Transgenderism*, 13, 165–232.
- Costa, R., Dunsford, M., Skagerberg, E., Holt V., Carmichael, P., & Colizzi, M. (2015). Psychological support, puberty suppression, and psychosocial functioning in adolescents with gender dysphoria. *Journal of Sexual Medicine*, 12, 2206–2214.
- Dahlen, S., Connolly, D., Arif, I., Hyder Junejo, M., Bewley, S., & Meads, C. (2021). *International clinical practice guidelines for gender minority/trans people: Systematic review and quality assessment. BMJ Open*, 11, e048943.
- Daniel, H., & Butkus, R. (2015a). Lesbian, gay, bisexual, and transgender health disparities: Executive summary of a policy position paper from the American College of Physicians. *Annals of Internal Medicine*, 163, 135–137.
- Daniel, H., & Butkus, R. (2015b). Appendix: Lesbian, gay, bisexual, and transgender health disparities: A policy position paper from the American College of Physicians. *Annals of Internal Medicine*, 163(2), [unpaginated].
- de Vries, A. L. C. & Cohen-Kettenis, P. T. (2012). Clinical management of gender dysphoria in children and adolescents: The Dutch Approach. *Journal of Homosexuality*, 59, 301–320.
- de Vries, A. L. C., McGuire, J. K., Steensma, T. D., Wagenaar, E. C. F., Doreleijers, T. A. H., & Cohen-Kettenis, P. T. (2014). Young adult psychological outcome after puberty suppression and gender reassignment. *Pediatrics*, 134, 1–9.
- de Vries, A. L. C., Steensma, T. D., Doreleijers, T. A. H., & Cohen-Kettenis, P. T. (2011). Puberty suppression in adolescents with gender identity disorder: A prospective follow-up study. *Journal of Sexual Medicine*, 8, 2276–2283.
- de Vries, A. L., Doreleijers, T. A., Steensma, T. D., & Cohen-Kettenis, P. T. (2011). Psychiatric comorbidity in gender dysphoric adolescents. *Journal of Child Psychology and Psychiatry*, 52, 1195–1202.
- de Vries, A. L., Noens, I. L., Cohen-Kettenis, P. T., van Berckelaer- Onnes, I. A., & Doreleijers, T. A. (2010). Autism spectrum disorders in gender dysphoric children and adolescents. *Journal of Autism and Developmental Disorders*, 40, 930–936.
- Delemarre-van de Waal, H. A., & Cohen-Kettenis, P. T. (2006). Clinical management of gender identity disorder in adolescents: A protocol on psychological and paediatric endocrinology aspects. *European Journal of Endocrinology*, 155 (suppl 1), S131–S137.
- Dhejne, C., Van Vlerken, R., Geylens, G., & Arcelus, J. (2016). Mental health and gender dysphoria: A review of the literature. *International Review of Psychiatry*, 28, 44–57.
- Dhejne, C., Lichtenstein, P., Boman, M., Johansson, A. L. V., Langström, N., & Landén, M. (2011). Long-term follow-up of transsexual persons undergoing sex

- reassignment surgery: Cohort study in Sweden. *PLoS ONE* 6(2), e16885.
- Dhejneberg, C., Öberg, K., Arver, S., & Landén, M. (2014). An analysis of all applications for sex reassignment surgery in Sweden, 1960–2010: Prevalence, incidence, and regrets. *Archives of Sexual Behavior*, 43, 1535–1545.
- Drummond, K. D., Bradley, S. J., Peterson-Badali, M., & Zucker, K. J. (2008). A follow up study of girls with gender identity disorder. *Developmental Psychology*, 44, 34–45.
- Durwood, L., McLaughlin, K. A., & Olson, K. R. (2017). Mental health and self-worth in socially transitioned transgender youth. *Journal of the American Academy of Child & Adolescent Psychiatry*, 56, 116–123.
- Finland Ministry of Social Affairs and Health, Council for Choices in Health Care. (2020, June 11). *Medical treatment methods for dysphoria associated with variations in gender identity in minors—Recommendation*. Retrieved from [https://palveluvalikoima.fi/documents/1237350/22895008/Summary_minors_en+\(1\).pdf/fa2054c5-8c35-8492-59d6-b3de1c00de49/Summary_minors_en+\(1\).pdf?t=1631773838474](https://palveluvalikoima.fi/documents/1237350/22895008/Summary_minors_en+(1).pdf/fa2054c5-8c35-8492-59d6-b3de1c00de49/Summary_minors_en+(1).pdf?t=1631773838474)
- Finland Ministry of Social Affairs and Health, Council for Choices in Health Care. (2020, June 16). *Medical treatments for gender dysphoria that reduces functional capacity in transgender people—Recommendation*. Retrieved from <https://palveluvalikoima.fi/documents/1237350/22895838/Summary+transgender.pdf/2cc3f053-2e34-39ce-4e21-becd685b3044/Summary+transgender.pdf?t=1592318543000>
- Freeman, A., Mergl, R., Kohls, E., Székely, A., Gusmao, R., Arensman, E., Koburger, N., Hegerl, U., & Rummel-Kluge, C. (2017). A cross-national study on gender differences in suicide intent. *BMC Psychiatry*, 17, 234.
- Green, R. (1987). *The “sissy boy syndrome” and the development of homosexuality*. New Haven, CT: Yale University Press.
- Hembree, W. C., Cohen-Kettenis, P. T., Gooren, L., Hannema, S. E., Meyer, W. J., Murad, M. H., Rosenthal, S. M., Safer, T. D., Tangpricha, V., & T’Sjoen, G. G. (2017). Endocrine treatment of gender-dysphoric/ gender-incongruent persons: An Endocrine Society clinical practice guideline. *Journal of Clinical Endocrinology & Metabolism*, 102, 3869–3903.
- Hepp, U., Kraemer, B., Schnyder, U., Miller, N., & Delsignore, A. (2005). Psychiatric comorbidity in gender identity disorder. *Journal of Psychosomatic Research*, 58, 259–261.
- Hisle-Gorman, E., Schvey, N. A., Adirim, T. A., Rayne, A. K., Susi, A., Roberts, T. A., & Klein, D. A. (2021). Mental healthcare utilization of transgender youth before and after affirming treatment. *The Journal of Sexual Medicine*, 18, 1444–1454.
- Holt, V., Skagerberg, E., & Dunsford, M. (2016). Young people with features of gender dysphoria: Demographics and associated difficulties. *Clinical Child Psychology and Psychiatry*, 21, 108–118.
- Jacobs, L. A., Rachlin, K., Erickson-Schroth, L., & Janssen, A. (2014). Gender dysphoria and co-occurring autism spectrum disorders: Review, case examples,

- and treatment considerations. *LGBT Health*, 1, 277–282.
- Janssen, A., Busa, S., Wernick, J. (2019). The complexities of treatment planning for transgender youth with co-occurring severe mental illness: A literature review and case study. *Archives of Sexual Behavior*, 48, 2003–2009.
- Janssen, A., Huang, H., & Duncan, C. (2016). Gender variance among youth with autism spectrum disorders: A retrospective chart review. *Transgender Health*, 1, 63–68.
- Kalin, N. H. (2020). Reassessing mental health treatment utilization reduction in transgender individuals after gender-affirming surgeries: A comment by the Editor on the process. *American Journal of Psychiatry*, 177, 765.
- Kaltiala, R., Heino, E., Työlajärvi, & Suomalainen, L. (2020). Adolescent development and psychosocial functioning after starting cross-sex hormones for gender dysphoria. *Nordic Journal of Psychiatry*, 74, 213–219.
- Kaltiala-Heino, R., Sumia, M., Työlajärvi, M., & Lindberg, N. (2015). Two years of gender identity service for minors: Overrepresentation of natal girls with severe problems in adolescent development. *Child and Adolescent Psychiatry and Mental Health*, 9, 9.
- Kuper, L. E., Stewart, S., Preston, S., Lau, M., & Lopez, X. (2020). Body dissatisfaction and mental health outcomes of youth on gender-affirming hormone therapy. *Pediatrics*, 145, e20193006.
- Lehmann, K., Rosato, M., McKenna, H., & Leavey, G. (2021). Dramaturgical accounts of transgender individuals: Impression management in the presentation of self to specialist gender services. *Archives of Sexual Behavior*, 50, 3539–3549.
- Littman, L. (2018). Parent reports of adolescents and young adults perceived to show signs of a rapid onset of gender dysphoria. *PLoS ONE*, 13(8), e0202330.
- May, T., Pang, K., & Williams, K. J. (2016). Gender variance in children and adolescents with autism spectrum disorder from the National Database for Autism Research. *International Journal of Transgenderism*, 18, 7–15.
- McCall, B. (2021, October 7). Psychiatrists shift stance on gender dysphoria, recommend therapy. *Medscape Psychiatry*. Retrieved from www.medscape.com/viewarticle/960390?src=soc_tw_share
- McNeil, J., Ellis, S. J., & Eccles, F. J. R. (2017). Suicide in trans populations: A systematic review of prevalence and correlates. *Psychology of Sexual Orientation and Gender Diversity*, 4, 341–353.
- Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin*, 129, 674–697.
- Money, J., & Russo, A. J. (1979). Homosexual outcome of discordant gender identity/role in childhood: Longitudinal follow-up. *Journal of Pediatric Psychology*, 4, 29–41.
- Mustanski, B. S., Garofalo, R., & Emerson, E. M. (2010). Mental health disorders,

- psychological distress, and suicidality in a diverse sample of lesbian, gay, bisexual, and transgender youths. *American Journal of Public Health*, 100, 2426–2432.
- Nainggolan, L. (2021, May 12). Hormonal Tx of youth with gender dysphoria stops in Sweden. Medscape Psychiatry. Retrieved from www.medscape.com/viewarticle/950964?src=soc_tw_share
- Olson, K. R., Durwood, L., DeMeules, M., & McLaughlin, K. A. (2016). Mental health of transgender children who are supported in their identities. *Pediatrics*, 137, e20153223.
- Pediatric Endocrine Society & Endocrine Society. (2020, December 15). *Transgender health*. Retrieved from www.endocrine.org/advocacy/position-statements/transgender-health.
- Pediatric Endocrine Society. (Online). About PES. Retrieved from <https://pedsendo.org/about-pes/>
- Rae, J. R., Gülgoz, S., Durwood, L., DeMeules, M., Lowe, R., Lindquist, G., & Olson, K. R. (2019). Predicting early-childhood gender transitions. *Psychological Science*, 30, 669–681.
- Rafferty, J., AAP Committee on psychosocial aspects of child and family health, AAP Committee on adolescence, AAP Section on lesbian, gay, bisexual, and transgender health and wellness. (2018). Ensuring comprehensive care and support for transgender and gender-diverse children and adolescents. *Pediatrics*, 142(4), e20182162
- Reisner, S. L., Veters, R., Leclerc, M., Zaslow, S., Wolfrum, S., Shumer, D., & Mimiaga, M. J. (2015). Mental health of transgender youth in care at an adolescent urban community health center: A matched retrospective cohort study. *Journal of Adolescent Health*, 56(3), 274–279.
- Reuter, T. R., Sharp, C., Kalpakci, A. H., Choi, H. J., & Temple, J. R. (2016). Sexual orientation and Borderline Personality Disorder features in a community sample of adolescents. *Journal of Personality Disorders*, 30, 694–707.
- Rodriguez-Seiljas, C., Morgan, T. A., & Zimmerman, M. (2021). A population-based examination of criterion-level disparities in the diagnosis of Borderline Personality Disorder among sexual minority adults. *Assessment*, 28, 1097–1109.
- Safer, J. D., Tangpricha, V. (2019). In the clinic: Care of the transgender patient. *Annals of Internal Medicine*, 171(1), ITC1–ITC6.
- Sax, L. (2002). How common is Intersex? A response to Ann Fausto-Sterling. *The Journal of Sex Research*, 39, 174–178.
- Schumm, W. R., Crawford, D. W., Fawver, M. M., Gray, N. K., Niess, Z. M., & Wagner, A. D. (2019). Statistical errors in major journals: Two case studies used in a basic statistics class to assess understanding of applied statistics. *Psychology and Education—An Interdisciplinary Journal*, 56, 35–42.
- Schumm, W. R., & Crawford, D. W. (2020). Is research on transgender children what it seems? Comments on recent research on transgender children with high levels

- of parental support. *The Linacre Quarterly*, 87, 9–24.
- Singh, D., Bradley, S. J., & Zucker, K. J. (2021). A follow-up study of boys with gender identity disorder. *Frontiers in Psychiatry*, 12, 632784.
- Skagerberg, E., Parkinson, R., & Carmichael, P. (2013). Self-harming thoughts and behaviors in a group of children and adolescents with gender dysphoria. *International Journal of Transgenderism*, 14, 86–92.
- Skelly, A. C., Dettori, J. R., & Brodt, E. D. (2012). Assessing bias: The importance of considering confounding. *Evidence-based Spine-Care Journal*, 3, 9–12.
- Spack, N. P., Edwards-Leeper, L., Feldman, H. A., Leibowitz, S., Mandel, F., Diamond, D. A., & Vance, S. R. (2012). Children and adolescents with gender identity disorder referred to a pediatric medical center. *Pediatrics*, 129, 418–425.
- Spack, N. P. (2013). Management of transgenderism. *Journal of the American Medical Association*, 309, 478–484.
- Steensma, T. D., & Cohen-Kettenis, P. T. (2018a). A critical commentary on “A critical commentary on follow-up studies and ‘desistance’ theories about transgender and gender-nonconforming children”. *International Journal of Transgenderism*, 19, 225–230.
- Steensma, T. D., Cohen-Kettenis, P. T., & Zucker, K. J. (2018b). Evidence for a change in the sex ratio of children referred for gender dysphoria: Data from the Center of Expertise on Gender Dysphoria in Amsterdam (1988–2016). *Journal of Sex & Marital Therapy*, 44, 713–715.
- Steensma, T. D., McGuire, J. K., Kreukels, B. P. C., Beekman, A. J., & Cohen-Kettenis, P. T. (2013). Factors associated with desistance and persistence of childhood gender dysphoria: A quantitative follow-up study. *Journal of the American Academy of Child and Adolescent Psychiatry*, 52, 582–590.
- Strang, J. F., Kenworthy, L., Dominska, A., Sokoloff, J., Kenealy, L. E., Berl, M., ... Wallace, G. L. (2014). Increased gender variance in autism spectrum disorders and attention deficit hyperactivity disorder. *Archives of Sexual Behavior*, 43, 1525–1533.
- Strang, J. F., Meagher, H., Kenworthy, L., de Vries, A. L., Menvielle, E., Leibowitz, S., ... Anthony, L. G. (2016). Initial clinical guidelines for co-occurring autism spectrum disorder and gender dysphoria or incongruence in adolescents. *Journal of Clinical Child and Adolescent Psychology*, 47, 105–115.
- Swedish Agency of Health Technology Assessment and Assessment of Social Services. (2019). *Gender dysphoria in children and adolescents: An inventory of the literature*. Retrieved from: www.sbu.se/en/publications/sbu-bereder/gender-dysphoria-in-children-and-adolescents-an-inventory-of-the-literature/
- Temple Newhook, J., Pyne, J., Winters, K., Feder, S., Holmes, C., Tosh, J. Sinnott, M.-L., Jamieson, A., & Pickett, S. (2018). A critical commentary on follow-up studies and “desistance” theories about transgender and gender-nonconforming children. *International Journal of Transgenderism*, 19, 212–224.

- Tetelepta, B. (2021, Feb 27). More research is urgently needed into transgender care for young people: 'Where does the large flow of children come from?' [translated]. *Algemeen Dagblad*. Retrieved from www.ad.nl/nijmegen/dringend-meer-onderzoek-nodig-naar-transgenderzorg-aan-jongeren-waar-komt-de-grote-stroom-kinderen-vandaan~aec79d00/?referrer=https%3A%2F%2Ft.co%2F.
- Thrower, E., Bretherton, I., Pang, K. C., Zajac, J. D., & Cheung, A. S. (2020). Prevalence of Autism Spectrum Disorder and Attention-Deficit Hyperactivity Disorder amongst individuals with Gender Dysphoria: A systematic review. *Journal of Autism and Developmental Disorders*, 50, 695–706.
- United Kingdom National Health Service (NHS), National Institute for Health and Care Excellence, (2021, March 11). *Evidence review: Gonadotrophin releasing hormone analogues for children and adolescents with gender dysphoria*. Retrieved from www.evidence.nhs.uk/document?id=2334888&returnUrl=search%3ffrom%3d2020-01-01%26q%3dgender%2bdysphoria%26sp%3don%26to%3d2021-03-31
- van der Miesen, A. I. R., Steensma, T. D., de Vries, A. L. C., Bos, H., Popma, A. (2020). Psychological functioning in transgender adolescence before and after gender-affirmative care compared with cisgender general population peers. *Journal of Adolescent Health*, 66, 699–704.
- Wallien, M. S. C., & Cohen-Kettenis, P. T. (2008). Psychosexual outcome of gender-dysphoric children. *Journal of the American Academy of Child & Adolescent Psychiatry*, 47, 1413–1423.
- Wallien, M. S., Swaab, H., & Cohen-Kettenis, P. T. (2007). Psychiatric comorbidity among children with gender identity disorder. *Journal of the American Academy of Child and Adolescent Psychiatry*, 46, 1307–1314.
- Warrier, V., Greenberg, D. M., Weir, E., Buckingham, C., Smith, P., Lai, M.-C., Allison, C., & Baron-Cohen, S. (2020). Elevated rates of autism, other neurodevelopmental and psychiatric diagnoses, and autistic traits in transgender and gender-diverse individuals. *Nature Communications*, 11, 3959.
- Wiepjes, C. M., den Heijer, M., Bremmer, M. A., Nota, N. M., de Block, C. J. M., Coumou, B. J. G., & Steensma, T. D. (2020). Trends in suicide death risk in transgender people: Results from the Amsterdam Cohort of Gender Dysphoria study (1972–2017). *Acta Psychiatrica Scandinavica*, 141, 486–491.
- Wiepjes, C. M., Nota, N. M., de Bok, C. J. M., Klaver, M., de Vries, A. L. C., Wensing-Kruger, S. A., de Jongh, R. T., Bouman, M.-B., Steensma, T. D., Cohen-Kettenis, P., Gooren, L. J. G., Kreukels B. P. C., & den Heijer, M. (2018). The Amsterdam Cohort of Gender Dysphoria Study (1972–2015): Trends in prevalence, treatment, and regrets. *Journal of Sexual Medicine*, 15, 582–590.
- Winters, K., Temple Newhook, J., Pyne, J., Feder, S., Jamieson, A., Holmes, C., Sinnott, M.-L., Pickett, S., & Tosh J. (2018). Learning to listen to trans and gender diverse children: A Response to Zucker (2018) and Steensma and Cohen-Kettenis (2018). *International Journal of Transgenderism*, 19, 246–250.
- Wood, H., Sasaki, S., Bradley, S. J., Singh, D., Fantus, S., Own-Anderson, A., Di Giacomo, A., Bain, J., & Zucker, K. J. (2013). Patterns of referral to a gender

identity service for children and adolescents (1976–2011): Age, sex ratio, and sexual orientation. *Journal of Sex & Marital Therapy*, 39, 1–6.

Zanarini, M. C., Magni, L. R., Temes, C. M., Hein, K. E., Aguirre, B. A., & Goodman, M. (2021). Sexual orientation and gender of intimate relationship partners among adolescents with BPD and psychiatrically healthy adolescents. *Journal of Personality Disorders*, 35 (Suppl. B), 1–7.

Zucker, K. J. (2018). The myth of persistence: Response to “A critical commentary on follow-up studies and ‘desistance’ theories about transgender and gender-nonconforming children” by Temple Newhook et al. (2018). *International Journal of Transgenderism*, 19, 231–245.

Zucker, K. J. (2019). Adolescents with gender dysphoria: Reflections on some contemporary clinical and research issues. *Archives of Sexual Behavior*, 48, 1983–1992.

Zucker, K. J., & Bradley, S. J. (1995). *Gender identity disorder and psychosexual problems in children and adolescents*. New York: Guilford Press.

Zucker, K. J., Bradley, S. J., Owen-Anderson, A., Kibblewhite, S. J., Wood, H., Singh, D., & Choi, K. (2012). Demographics, behavior problems, and psychosexual characteristics of adolescents with gender identity disorder or transvestic fetishism. *Journal of Sex & Marital Therapy*, 38, 151–189.

Zuger, B. (1984). Early effeminate behavior in boys: Outcome and significance for homosexuality. *Journal of Nervous and Mental Disease*, 172, 90–97.

EXPERT REPORT OF JAMES M. CANTOR, PHD

APPENDIX 1

James M. Cantor, PhD

Toronto Sexuality Centre
2 Carlton Ave., suite 1820
Toronto, Ontario, Canada M5B 1J3

416-766-8733 (o)
416-352-6003 (f)
jamescantorphd@gmail.com

EDUCATION

Postdoctoral Fellowship

Centre for Addiction and Mental Health • Toronto, Canada

Jan., 2000–May, 2004

Doctor of Philosophy

Psychology • McGill University • Montréal, Canada

Sep., 1993–Jun., 2000

Master of Arts

Psychology • Boston University • Boston, MA

Sep., 1990–Jan., 1992

Bachelor of Science

Interdisciplinary Science • Rensselaer Polytechnic Institute • Troy, NY
Concentrations: Computer science, mathematics, physics

Sep. 1984–Aug., 1988

EMPLOYMENT HISTORY

Director

Toronto Sexuality Centre • Toronto, Canada

Feb., 2017–Present

Senior Scientist (Inaugural Member)

Campbell Family Mental Health Research Institute
Centre for Addiction and Mental Health • Toronto, Canada

Aug., 2012–May, 2018

Senior Scientist

Complex Mental Illness Program
Centre for Addiction and Mental Health • Toronto, Canada

Jan., 2012–May, 2018

Head of Research

Sexual Behaviours Clinic
Centre for Addiction and Mental Health • Toronto, Canada

Nov., 2010–Apr. 2014

Research Section Head

Law & Mental Health Program
Centre for Addiction and Mental Health • Toronto, Canada

Dec., 2009–Sep. 2012

Psychologist

Law & Mental Health Program
Centre for Addiction and Mental Health • Toronto, Canada

May, 2004–Dec., 2011

Clinical Psychology Intern

Centre for Addiction and Mental Health • Toronto, Canada

Sep., 1998–Aug., 1999

Teaching Assistant

Department of Psychology
McGill University • Montréal, Canada

Sep., 1993–May, 1998

Pre-Doctoral Practicum

Sex and Couples Therapy Unit
Royal Victoria Hospital • Montréal, Canada

Sep., 1993–Jun., 1997

Pre-Doctoral Practicum

Department of Psychiatry
Queen Elizabeth Hospital • Montréal, Canada

May, 1994–Dec., 1994

ACADEMIC APPOINTMENTS

Associate Professor

Department of Psychiatry
University of Toronto Faculty of Medicine • Toronto, Canada

Jul., 2010–May, 2019

Adjunct Faculty

Graduate Program in Psychology
York University • Toronto, Canada

Aug. 2013–Jun., 2018

Associate Faculty (Hon)

School of Behavioural, Cognitive & Social Science
University of New England • Armidale, Australia

Oct., 2017–Dec., 2017

Assistant Professor

Department of Psychiatry
University of Toronto Faculty of Medicine • Toronto, Canada

Jun., 2005–Jun., 2010

Adjunct Faculty

Clinical Psychology Residency Program
St. Joseph's Healthcare • Hamilton, Canada

Sep., 2004–Jun., 2010

PUBLICATIONS

1. Cantor, J. M. (2020). Transgender and gender diverse children and adolescents: Fact-checking of AAP policy. *Journal of Sex & Marital Therapy*, 46, 307–313. doi: 10.1080/0092623X.2019.1698481
2. Shirazi, T., Self, H., Cantor, J., Dawood, K., Cardenas, R., Rosenfield, K., Ortiz, T., Carré, J., McDaniel, M., Blanchard, R., Balasubramanian, R., Delaney, A., Crowley, W., S Marc Breedlove, S. M., & Puts, D. (2020). Timing of peripubertal steroid exposure predicts visuospatial cognition in men: Evidence from three samples. *Hormones and Behavior*, 121, 104712.
3. Stephens, S., Seto, M. C., Cantor, J. M., & Lalumière, M. L. (2019). The Screening Scale for Pedophilic Interest-Revised (SSPI-2) may be a measure of pedohebephilia. *Journal of Sexual Medicine*, 16, 1655–1663. doi: 10.1016/j.jsxm.2019.07.015
4. McPhail, I. V., Hermann, C. A., Fernane, S., Fernandez, Y. M., Nunes, K. L., & Cantor, J. M. (2019). Validity in phallometric testing for sexual interests in children: A meta-analytic review. *Assessment*, 26, 535–551. doi: 10.1177/1073191117706139
5. Cantor, J. M. (2018). Can pedophiles change? *Current Sexual Health Reports*, 10, 203–206. doi: 10.1007/s11930-018-0165-2
6. Cantor, J. M., & Fedoroff, J. P. (2018). Can pedophiles change? Response to opening arguments and conclusions. *Current Sexual Health Reports*, 10, 213–220. doi: 10.1007/s11930-018-0167-0z
7. Stephens, S., Seto, M. C., Goodwill, A. M., & Cantor, J. M. (2018). Age diversity among victims of hebephilic sexual offenders. *Sexual Abuse*, 30, 332–339. doi: 10.1177/1079063216665837
8. Stephens, S., Seto, M. C., Goodwill, A. M., & Cantor, J. M. (2018). The relationships between victim age, gender, and relationship polymorphism and sexual recidivism. *Sexual Abuse*, 30, 132–146. doi: 10.1177/1079063216630983
9. Stephens, S., Newman, J. E., Cantor, J. M., & Seto, M. C. (2018). The Static-99R predicts sexual and violent recidivism for individuals with low intellectual functioning. *Journal of Sexual Aggression*, 24, 1–11. doi: 10.1080/13552600.2017.1372936
10. Cantor, J. M. (2017). Sexual deviance or social deviance: What MRI research reveals about pedophilia. *ATSA Forum*, 29(2). Association for the Treatment of Sexual Abusers. Beaverton, OR. <http://newsmanager.commpartners.com/atsa/issues/2017-03-15/2.html>
11. Walton, M. T., Cantor, J. M., Bhullar, N., & Lykins, A. D. (2017). Hypersexuality: A critical review and introduction to the “Sexhavior Cycle.” *Archives of Sexual Behavior*, 46, 2231–2251. doi: 10.1007/s10508-017-0991-8
12. Stephens, S., Leroux, E., Skilling, T., Cantor, J. M., & Seto, M. C. (2017). A taxometric analysis of pedophilia utilizing self-report, behavioral, and sexual arousal indicators. *Journal of Abnormal Psychology*, 126, 1114–1119. doi: 10.1037/abn0000291
13. Fazio, R. L., Dyshniku, F., Lykins, A. D., & Cantor, J. M. (2017). Leg length versus torso length in pedophilia: Further evidence of atypical physical development early in life. *Sexual Abuse: A Journal of Research and Treatment*, 29, 500–514. doi: 10.1177/1079063215609936
14. Seto, M. C., Stephens, S., Lalumière, M. L., & Cantor, J. M. (2017). The Revised Screening Scale for Pedophilic Interests (SSPI-2): Development and criterion-related validation. *Sexual Abuse: A Journal of Research and Treatment*, 29, 619–635. doi:

10.1177/1079063215612444

15. Stephens, S., Cantor, J. M., Goodwill, A. M., & Seto, M. C. (2017). Multiple indicators of sexual interest in prepubescent or pubescent children as predictors of sexual recidivism. *Journal of Consulting and Clinical Psychology, 85*, 585–595. doi: 10.1037/ccp0000194
16. Stephens, S., Seto, M. C., Goodwill, A. M., & Cantor, J. M. (2017). Evidence of construct validity in the assessment of hebephilia. *Archives of Sexual Behavior, 46*, 301–309. doi: 10.1007/s10508-016-0907-z
17. Walton, M. T., Cantor, J. M., & Lykins, A. D. (2017). An online assessment of personality, psychological, and sexuality trait variables associated with self-reported hypersexual behavior. *Archives of Sexual Behavior, 46*, 721–733. doi: 10.1007/s10508-015-0606-1
18. Cantor, J. M., Lafaille, S. J., Hannah, J., Kucyi, A., Soh, D. W., Girard, T. A., & Mikulis, D. J. (2016). Independent component analysis of resting-state functional magnetic resonance imaging in pedophiles. *Journal of Sexual Medicine, 13*, 1546–1554. doi: 10.1016/j.jsxm.2016.08.004
19. Cantor, J. M., & McPhail, I. V. (2016). Non-offending pedophiles. *Current Sexual Health Reports, 8*, 121–128. doi: 10.1007/s11930-016-0076-z
20. Cantor, J. M. (2015). Milestones in sex research: What causes pedophilia? In J. S. Hyde, J. D. DeLamater, & E. S. Byers (Eds.), *Understanding human sexuality* (6th Canadian ed.) (pp. 452–453). Toronto: McGraw-Hill Ryerson.
21. Cantor, J. M. (2015). Pedophilia. In R. Cautin & S. Lilienfeld (Eds.), *Encyclopedia of clinical psychology*. Malden, MA: Wiley-Blackwell. doi: 10.1002/9781118625392.wbecp184
22. Nunes, K. L., & Cantor, J. M. (2015). Sex offenders. In P. Whelehan & A. Bolin (Eds.), *International encyclopedia of human sexuality*. Malden, MA: Wiley-Blackwell.
23. Cantor, J. M., Lafaille, S., Soh, D. W., Moayed, M., Mikulis, D. J., & Girard, T. A. (2015). Diffusion Tensor Imaging of pedophilia. *Archives of Sexual Behavior, 44*, 2161–2172. doi: 10.1007/s10508-015-0599-9
24. Cantor, J. M., & McPhail, I. V. (2015). Sensitivity and specificity for the phallometric test of hebephilia. *Journal of Sexual Medicine, 12*, 1940–1950. doi: 10.1111/jsm12970
25. Dyshniku, F., Murray, M. E., Fazio, R. L., Lykins, A. D., & Cantor, J. M. (2015). Minor physical anomalies as a window into the prenatal origins of pedophilia. *Archives of Sexual Behavior, 44*, 2151–2159. doi: 10.1007/s10508-015-0564-7
26. Fazio, R. L., & Cantor, J. M. (2015). Factor structure of the Edinburgh Handedness Inventory versus the Fazio Laterality Inventory in a population with established atypical handedness. *Applied Neuropsychology, 22*, 156–160. doi: 10.1080/23279095.2014.940043
27. Lykins, A. D., Robinson, J. J., LeBlanc, S., & Cantor, J. M. (2015). The effects of common medications on volumetric phallometry. *Journal of Sexual Aggression, 21*, 385–393. doi: 10.1080/13552600.2014.900121
28. Sutton, K. S., Stratton, N., Pytyck, J., Kolla, N. J., & Cantor, J. M. (2015). Patient characteristics by type of hypersexuality referral: A quantitative chart review of 115 consecutive male cases. *Journal of Sex and Marital Therapy, 41*, 563–580. doi: 10.1080/0092623X.2014.935539
29. Cantor, J. M. (2014). Gold star pedophiles in general sex therapy practice. In Y. M. Binik and K. Hall (Eds.), *Principles and practice of sex therapy* (5th ed.) (pp. 219–234). New York: Guilford.

30. Cantor, J. M., & Sutton, K. S. (2014). Paraphilia, gender dysphoria, and hypersexuality. In P. H. Blaney & T. Millon (Eds.), *Oxford textbook of psychopathology* (3rd ed.) (pp. 589–614). New York: Oxford University Press.
31. Chivers, M. L., Roy, C., Grimbos, T., Cantor, J. M., & Seto, M. C. (2014). Specificity of sexual arousal for sexual activities in men and women with conventional and masochistic sexual interests. *Archives of Sexual Behavior*, 43, 931–940. doi: 10.1007/s10508-013-0174-1
32. Fazio, R. L., Lykins, A. D., & Cantor, J. M. (2014). Elevated rates of atypical-handedness in paedophilia: Theory and implications. *Laterality*, 19, 690–704. doi: 10.1080/1357650X.2014.898648
33. Lykins, A. D., & Cantor, J. M. (2014). Vorarephilia: A case study in masochism and erotic consumption. *Archives of Sexual Behavior*, 43, 181–186. doi: 10.1007/s10508-013-0185-y
34. Cantor, J. M., Klein, C., Lykins, A., Rullo, J. E., Thaler, L., & Walling, B. R. (2013). A treatment-oriented typology of self-identified hypersexuality referrals. *Archives of Sexual Behavior*, 42, 883–893. doi: 10.1007/s10508-013-0085-1
35. Blanchard, R., Kuban, M. E., Blak, T., Klassen, P. E., Dickey, R., & Cantor, J. M. (2012). Sexual attraction to others: A comparison of two models of alloerotic responding in men. *Archives of Sexual Behavior*, 41, 13–29. doi: 10.1007/s10508-010-9675-3
36. Cantor, J. M. (2012). Brain research and pedophilia: What it says and what it means [Invited article]. *Sex Offender Law Report*, 13, 81–85.
37. Cantor, J. M. (2012). Is homosexuality a paraphilia? The evidence for and against. *Archives of Sexual Behavior*, 41, 237–247. doi: 10.1007/s10508-012-9900-3
38. Lykins, A. D., Cantor, J. M., Kuban, M. E., Blak, T., Dickey, R., Klassen, P. E., & Blanchard, R. (2010). Sexual arousal to female children in gynephilic men. *Sexual Abuse: A Journal of Research and Treatment*, 22, 279–289. doi: 10.1177/1079063210372141
39. Lykins, A. D., Cantor, J. M., Kuban, M. E., Blak, T., Dickey, R., Klassen, P. E., & Blanchard, R. (2010). The relation between peak response magnitudes and agreement in diagnoses obtained from two different phallometric tests for pedophilia. *Sexual Abuse: A Journal of Research and Treatment*, 22, 42–57. doi: 10.1177/1079063209352094
40. Cantor, J. M., Blanchard, R., & Barbaree, H. E. (2009). Sexual disorders. In P. H. Blaney & T. Millon (Eds.), *Oxford textbook of psychopathology* (2nd ed.) (pp. 527–548). New York: Oxford University Press.
41. Barbaree, H. E., Langton, C. M., Blanchard, R., & Cantor, J. M. (2009). Aging versus stable enduring traits as explanatory constructs in sex offender recidivism: Partitioning actuarial prediction into conceptually meaningful components. *Criminal Justice and Behavior: An International Journal*, 36, 443–465. doi: 10.1177/0093854809332283
42. Blanchard, R., Kuban, M. E., Blak, T., Cantor, J. M., Klassen, P. E., & Dickey, R. (2009). Absolute versus relative ascertainment of pedophilia in men. *Sexual Abuse: A Journal of Research and Treatment*, 21, 431–441. doi: 10.1177/1079063209347906
43. Blanchard, R., Lykins, A. D., Wherrett, D., Kuban, M. E., Cantor, J. M., Blak, T., Dickey, R., & Klassen, P. E. (2009). Pedophilia, hebephilia, and the DSM–V. *Archives of Sexual Behavior*, 38, 335–350. doi: 10.1007/s10508-008-9399-9.
44. Cantor, J. M. (2008). MRI research on pedophilia: What ATSA members should know

- [Invited article]. *ATSA Forum*, 20(4), 6–10.
45. Cantor, J. M., Kabani, N., Christensen, B. K., Zipursky, R. B., Barbaree, H. E., Dickey, R., Klassen, P. E., Mikulis, D. J., Kuban, M. E., Blak, T., Richards, B. A., Hanratty, M. K., & Blanchard, R. (2008). Cerebral white matter deficiencies in pedophilic men. *Journal of Psychiatric Research*, 42, 167–183. doi: 10.1016/j.jpsychires.2007.10.013
 46. Blanchard, R., Kolla, N. J., Cantor, J. M., Klassen, P. E., Dickey, R., Kuban, M. E., & Blak, T. (2007). IQ, handedness, and pedophilia in adult male patients stratified by referral source. *Sexual Abuse: A Journal of Research and Treatment*, 19, 285–309. doi: 10.1007/s11194-007-9049-0
 47. Cantor, J. M., Kuban, M. E., Blak, T., Klassen, P. E., Dickey, R., & Blanchard, R. (2007). Physical height in pedophilia and hebephilia. *Sexual Abuse: A Journal of Research and Treatment*, 19, 395–407. doi: 10.1007/s11194-007-9060-5
 48. Blanchard, R., Cantor, J. M., Bogaert, A. F., Breedlove, S. M., & Ellis, L. (2006). Interaction of fraternal birth order and handedness in the development of male homosexuality. *Hormones and Behavior*, 49, 405–414. doi: 10.1016/j.yhbeh.2005.09.002
 49. Blanchard, R., Kuban, M. E., Blak, T., Cantor, J. M., Klassen, P., & Dickey, R. (2006). Phallometric comparison of pedophilic interest in nonadmitting sexual offenders against stepdaughters, biological daughters, other biologically related girls, and unrelated girls. *Sexual Abuse: A Journal of Research and Treatment*, 18, 1–14. doi: 10.1007/s11194-006-9000-9
 50. Blanchard, R., Cantor, J. M., & Robichaud, L. K. (2006). Biological factors in the development of sexual deviance and aggression in males. In H. E. Barbaree & W. L. Marshall (Eds.), *The juvenile sex offender* (2nd ed., pp. 77–104). New York: Guilford.
 51. Cantor, J. M., Kuban, M. E., Blak, T., Klassen, P. E., Dickey, R., & Blanchard, R. (2006). Grade failure and special education placement in sexual offenders' educational histories. *Archives of Sexual Behavior*, 35, 743–751. doi: 10.1007/s10508-006-9018-6
 52. Seto, M. C., Cantor, J. M., & Blanchard, R. (2006). Child pornography offenses are a valid diagnostic indicator of pedophilia. *Journal of Abnormal Psychology*, 115, 610–615. doi: 10.1037/0021-843X.115.3.610
 53. Zucker, K. J., Mitchell, J. N., Bradley, S. J., Tkachuk, J., Cantor, J. M., & Allin, S. M. (2006). The Recalled Childhood Gender Identity/Gender Role Questionnaire: Psychometric properties. *Sex Roles*, 54, 469–483. doi: 10.1007/s11199-006-9019-x
 54. Cantor, J. M., Blanchard, R., Robichaud, L. K., & Christensen, B. K. (2005). Quantitative reanalysis of aggregate data on IQ in sexual offenders. *Psychological Bulletin*, 131, 555–568. doi: 10.1037/0033-2909.131.4.555
 55. Cantor, J. M., Klassen, P. E., Dickey, R., Christensen, B. K., Kuban, M. E., Blak, T., Williams, N. S., & Blanchard, R. (2005). Handedness in pedophilia and hebephilia. *Archives of Sexual Behavior*, 34, 447–459. doi: 10.1007/s10508-005-4344-7
 56. Cantor, J. M., Blanchard, R., Christensen, B. K., Dickey, R., Klassen, P. E., Beckstead, A. L., Blak, T., & Kuban, M. E. (2004). Intelligence, memory, and handedness in pedophilia. *Neuropsychology*, 18, 3–14. doi: 10.1037/0894-4105.18.1.3
 57. Blanchard, R., Kuban, M. E., Klassen, P., Dickey, R., Christensen, B. K., Cantor, J. M., & Blak, T. (2003). Self-reported injuries before and after age 13 in pedophilic and non-pedophilic men referred for clinical assessment. *Archives of Sexual Behavior*, 32, 573–581.

58. Blanchard, R., Christensen, B. K., Strong, S. M., Cantor, J. M., Kuban, M. E., Klassen, P., Dickey, R., & Blak, T. (2002). Retrospective self-reports of childhood accidents causing unconsciousness in phallometrically diagnosed pedophiles. *Archives of Sexual Behavior*, 31, 511–526.
59. Cantor, J. M., Blanchard, R., Paterson, A. D., Bogaert, A. F. (2002). How many gay men owe their sexual orientation to fraternal birth order? *Archives of Sexual Behavior*, 31, 63–71.
60. Cantor, J. M., Binik, Y. M., & Pfaus, J. G. (1999). Chronic fluoxetine inhibits sexual behavior in the male rat: Reversal with oxytocin. *Psychopharmacology*, 144, 355–362.
61. Binik, Y. M., Cantor, J., Ochs, E., & Meana, M. (1997). From the couch to the keyboard: Psychotherapy in cyberspace. In S. Kiesler (Ed.), *Culture of the internet* (pp. 71–100). Mahwah, NJ: Lawrence Erlbaum.
62. Johnson, M. K., O'Connor, M., & Cantor, J. (1997). Confabulation, memory deficits, and frontal dysfunction. *Brain and Cognition*, 34, 189–206.
63. Keane, M. M., Gabrieli, J. D. E., Monti, L. A., Fleischman, D. A., Cantor, J. M., & Nolan, J. S. (1997). Intact and impaired conceptual memory processes in amnesia. *Neuropsychology*, 11, 59–69.
64. Pilkington, N. W., & Cantor, J. M. (1996). Perceptions of heterosexual bias in professional psychology programs: A survey of graduate students. *Professional Psychology: Research and Practice*, 27, 604–612.

PUBLICATIONS

LETTERS AND COMMENTARIES

1. Cantor, J. M. (2015). Research methods, statistical analysis, and the phallometric test for hebephilia: Response to Fedoroff [Editorial Commentary]. *Journal of Sexual Medicine*, 12, 2499–2500. doi: 10.1111/jsm.13040
2. Cantor, J. M. (2015). In his own words: Response to Moser [Editorial Commentary]. *Journal of Sexual Medicine*, 12, 2502–2503. doi: 10.1111/jsm.13075
3. Cantor, J. M. (2015). Purported changes in pedophilia as statistical artefacts: Comment on Müller et al. (2014). *Archives of Sexual Behavior*, 44, 253–254. doi: 10.1007/s10508-014-0343-x
4. McPhail, I. V., & Cantor, J. M. (2015). Pedophilia, height, and the magnitude of the association: A research note. *Deviant Behavior*, 36, 288–292. doi: 10.1080/01639625.2014.935644
5. Soh, D. W., & Cantor, J. M. (2015). A peek inside a furry convention [Letter to the Editor]. *Archives of Sexual Behavior*, 44, 1–2. doi: 10.1007/s10508-014-0423-y
6. Cantor, J. M. (2012). Reply to Italiano's (2012) comment on Cantor (2011) [Letter to the Editor]. *Archives of Sexual Behavior*, 41, 1081–1082. doi: 10.1007/s10508-012-0011-y
7. Cantor, J. M. (2012). The errors of Karen Franklin's *Pretextuality* [Commentary]. *International Journal of Forensic Mental Health*, 11, 59–62. doi: 10.1080/14999013.2012.672945
8. Cantor, J. M., & Blanchard, R. (2012). White matter volumes in pedophiles, hebephiles, and teleiophiles [Letter to the Editor]. *Archives of Sexual Behavior*, 41, 749–752. doi: 10.1007/s10508-012-9954-2
9. Cantor, J. M. (2011). New MRI studies support the Blanchard typology of male-to-female transsexualism [Letter to the Editor]. *Archives of Sexual Behavior*, 40, 863–864. doi: 10.1007/s10508-011-9805-6
10. Zucker, K. J., Bradley, S. J., Own-Anderson, A., Kibblewhite, S. J., & Cantor, J. M. (2008). Is gender identity disorder in adolescents coming out of the closet? *Journal of Sex and Marital Therapy*, 34, 287–290.
11. Cantor, J. M. (2003, Summer). Review of the book *The Man Who Would Be Queen* by J. Michael Bailey. *Newsletter of Division 44 of the American Psychological Association*, 19(2), 6.
12. Cantor, J. M. (2003, Spring). What are the hot topics in LGBT research in psychology? *Newsletter of Division 44 of the American Psychological Association*, 19(1), 21–24.
13. Cantor, J. M. (2002, Fall). Male homosexuality, science, and pedophilia. *Newsletter of Division 44 of the American Psychological Association*, 18(3), 5–8.
14. Cantor, J. M. (2000). Review of the book *Sexual Addiction: An Integrated Approach*. *Journal of Sex and Marital Therapy*, 26, 107–109.

EDITORIALS

1. Cantor, J. M. (2012). Editorial. *Sexual Abuse: A Journal of Research and Treatment*, 24.

2. Cantor, J. M. (2011). Editorial note. *Sexual Abuse: A Journal of Research and Treatment*, 23, 414.
3. Barbaree, H. E., & Cantor, J. M. (2010). Performance indicators for *Sexual Abuse: A Journal of Research and Treatment* (SAJRT) [Editorial]. *Sexual Abuse: A Journal of Research and Treatment*, 22, 371–373.
4. Barbaree, H. E., & Cantor, J. M. (2009). *Sexual Abuse: A Journal of Research and Treatment* performance indicators for 2007 [Editorial]. *Sexual Abuse: A Journal of Research and Treatment*, 21, 3–5.
5. Zucker, K. J., & Cantor, J. M. (2009). Cruising: Impact factor data [Editorial]. *Archives of Sexual Research*, 38, 878–882.
6. Barbaree, H. E., & Cantor, J. M. (2008). Performance indicators for *Sexual Abuse: A Journal of Research and Treatment* [Editorial]. *Sexual Abuse: A Journal of Research and Treatment*, 20, 3–4.
7. Zucker, K. J., & Cantor, J. M. (2008). The *Archives* in the era of online first ahead of print [Editorial]. *Archives of Sexual Behavior*, 37, 512–516.
8. Zucker, K. J., & Cantor, J. M. (2006). The impact factor: The *Archives* breaks from the pack [Editorial]. *Archives of Sexual Behavior*, 35, 7–9.
9. Zucker, K. J., & Cantor, J. M. (2005). The impact factor: “Goin’ up” [Editorial]. *Archives of Sexual Behavior*, 34, 7–9.
10. Zucker, K., & Cantor, J. M. (2003). The numbers game: The impact factor and all that jazz [Editorial]. *Archives of Sexual Behavior*, 32, 3–5.

FUNDING HISTORY

Principal Investigators: Doug VanderLaan, Meng-Chuan Lai
Co-Investigators: James M. Cantor, Megha Mallar Chakravarty, Nancy Lobaugh, M. Palmert, M. Skorska
Title: *Brain function and connectomics following sex hormone treatment in adolescents experience gender dysphoria*
Agency: Canadian Institutes of Health Research (CIHR), Behavioural Sciences-B-2
Funds: \$650,250 / 5 years (July, 2018)

Principal Investigator: Michael C. Seto
Co-Investigators: Martin Lalumière, James M. Cantor
Title: *Are connectivity differences unique to pedophilia?*
Agency: University Medical Research Fund, Royal Ottawa Hospital
Funds: \$50,000 / 1 year (January, 2018)

Principal Investigator: Lori Brotto
Co-Investigators: Anthony Bogaert, James M. Cantor, Gerulf Rieger
Title: *Investigations into the neural underpinnings and biological correlates of asexuality*
Agency: Natural Sciences and Engineering Research Council (NSERC), Discovery Grants Program
Funds: \$195,000 / 5 years (April, 2017)

Principal Investigator: Doug VanderLaan
Co-Investigators: Jerald Bain, James M. Cantor, Megha Mallar Chakravarty, Sofia Chavez, Nancy Lobaugh, and Kenneth J. Zucker
Title: *Effects of sex hormone treatment on brain development: A magnetic resonance imaging study of adolescents with gender dysphoria*
Agency: Canadian Institutes of Health Research (CIHR), Transitional Open Grant Program
Funds: \$952,955 / 5 years (September, 2015)

Principal Investigator: James M. Cantor
Co-Investigators: Howard E. Barbaree, Ray Blanchard, Robert Dickey, Todd A. Girard, Phillip E. Klassen, and David J. Mikulis
Title: *Neuroanatomic features specific to pedophilia*
Agency: Canadian Institutes of Health Research (CIHR)
Funds: \$1,071,920 / 5 years (October, 2008)

Principal Investigator: James M. Cantor
Title: *A preliminary study of fMRI as a diagnostic test of pedophilia*
Agency: Dean of Medicine New Faculty Grant Competition, Univ. of Toronto
Funds: \$10,000 (July, 2008)

Principal Investigator: James M. Cantor
Co-Investigator: Ray Blanchard
Title: *Morphological and neuropsychological correlates of pedophilia*
Agency: Canadian Institutes of Health Research (CIHR)
Funds: \$196,902 / 3 years (April, 2006)

KEYNOTE AND INVITED ADDRESSES

1. Cantor, J. M. (2021, September 28). *No topic too tough for this expert panel: A year in review*. Plenary Session for the 40th Annual Research and Treatment Conference, Association for the Treatment of Sexual Abusers.
2. Cantor, J. M. (2019, May 1). *Introduction and Q&A for 'I, Pedophile.'* StopSO 2nd Annual Conference, London, UK.
3. Cantor, J. M. (2018, August 29). *Neurobiology of pedophilia or paraphilia? Towards a 'Grand Unified Theory' of sexual interests*. Keynote address to the International Association for the Treatment of Sexual Offenders, Vilnius, Lithuania.
4. Cantor, J. M. (2018, August 29). *Pedophilia and the brain: Three questions asked and answered*. Preconference training presented to the International Association for the Treatment of Sexual Offenders, Vilnius, Lithuania.
5. Cantor, J. M. (2018, April 13). *The responses to I, Pedophile from We, the people*. Keynote address to the Minnesota Association for the Treatment of Sexual Abusers, Minneapolis, Minnesota.
6. Cantor, J. M. (2018, April 11). *Studying atypical sexualities: From vanilla to I, Pedophile*. Full day workshop at the Minnesota Association for the Treatment of Sexual Abusers, Minneapolis, Minnesota.
7. Cantor, J. M. (2018, January 20). *How much sex is enough for a happy life?* Invited lecture to the University of Toronto Division of Urology Men's Health Summit, Toronto, Canada.
8. Cantor, J. M. (2017, November 2). *Pedophilia as a phenomenon of the brain: Update of evidence and the public response*. Invited presentation to the 7th annual SBC education event, Centre for Addiction and Mental Health, Toronto, Canada.
9. Cantor, J. M. (2017, June 9). *Pedophilia being in the brain: The evidence and the public's reaction*. Invited presentation to *SEXposium at the ROM: The science of love and sex*, Toronto, Canada.
10. Cantor, J. M., & Campea, M. (2017, April 20). *"I, Pedophile" showing and discussion*. Invited presentation to the 42nd annual meeting of the Society for Sex Therapy and Research, Montréal, Canada.
11. Cantor, J. M. (2017, March 1). *Functional and structural neuroimaging of pedophilia: Consistencies across methods and modalities*. Invited lecture to the Brain Imaging Centre, Royal Ottawa Hospital, Ottawa, Canada.
12. Cantor, J. M. (2017, January 26). *Pedophilia being in the brain: The evidence and the public reaction*. Inaugural keynote address to the University of Toronto Sexuality Interest Network, Toronto, Ontario, Canada.
13. Cantor, J. M. (2016, October 14). *Discussion of CBC's "I, Pedophile."* Office of the Children's Lawyer Educational Session, Toronto, Ontario, Canada.
14. Cantor, J. M. (2016, September 15). *Evaluating the risk to reoffend: What we know and what we don't*. Invited lecture to the Association of Ontario Judges, Ontario Court of Justice Annual Family Law Program, Blue Mountains, Ontario, Canada. [Private link only: <https://vimeo.com/239131108/3387c80652>]
15. Cantor, J. M. (2016, April 8). *Pedophilia and the brain: Conclusions from the second generation of research*. Invited lecture at the 10th annual Risk and Recovery Forensic Conference, Hamilton, Ontario.

16. Cantor, J. M. (2016, April 7). *Hypersexuality without the hyperbole*. Keynote address to the 10th annual Risk and Recovery Forensic Conference, Hamilton, Ontario.
17. Cantor, J. M. (2015, November). *No one asks to be sexually attracted to children: Living in Daniel's World*. Grand Rounds, Centre for Addiction and Mental Health. Toronto, Canada.
18. Cantor, J. M. (2015, August). *Hypersexuality: Getting past whether "it" is or "it" isn't*. Invited address at the 41st annual meeting of the International Academy of Sex Research. Toronto, Canada.
19. Cantor, J. M. (2015, July). *A unified theory of typical and atypical sexual interest in men: Paraphilia, hypersexuality, asexuality, and vanilla as outcomes of a single, dual opponent process*. Invited presentation to the 2015 Puzzles of Sexual Orientation conference, Lethbridge, AL, Canada.
20. Cantor, J. M. (2015, June). *Hypersexuality*. Keynote Address to the Ontario Problem Gambling Provincial Forum. Toronto, Canada.
21. Cantor, J. M. (2015, May). *Assessment of pedophilia: Past, present, future*. Keynote Address to the International Symposium on Neural Mechanisms Underlying Pedophilia and Child Sexual Abuse (NeMUP). Berlin, Germany.
22. Cantor, J. M. (2015, March). *Prevention of sexual abuse by tackling the biggest stigma of them all: Making sex therapy available to pedophiles*. Keynote address to the 40th annual meeting of the Society for Sex Therapy and Research, Boston, MA.
23. Cantor, J. M. (2015, March). *Pedophilia: Predisposition or perversion?* Panel discussion at Columbia University School of Journalism. New York, NY.
24. Cantor, J. M. (2015, February). *Hypersexuality*. Research Day Grand Rounds presentation to Ontario Shores Centre for Mental Health Sciences, Whitby, Ontario, Canada.
25. Cantor, J. M. (2015, January). *Brain research and pedophilia: What it means for assessment, research, and policy*. Keynote address to the inaugural meeting of the Netherlands Association for the Treatment of Sexual Abusers, Utrecht, Netherlands.
26. Cantor, J. M. (2014, December). *Understanding pedophilia and the brain: Implications for safety and society*. Keynote address for The Jewish Community Confronts Violence and Abuse: Crisis Centre for Religious Women, Jerusalem, Israel.
27. Cantor, J. M. (2014, October). *Understanding pedophilia & the brain*. Invited full-day workshop for the Sex Offender Assessment Board of Pennsylvania, Harrisburg, PA.
28. Cantor, J. M. (2014, September). *Understanding neuroimaging of pedophilia: Current status and implications*. Invited lecture presented to the Mental Health and Addiction Rounds, St. Joseph's Healthcare, Hamilton, Ontario, Canada.
29. Cantor, J. M. (2014, June). *An evening with Dr. James Cantor*. Invited lecture presented to the Ontario Medical Association, District 11 Doctors' Lounge Program, Toronto, Ontario, Canada.
30. Cantor, J. M. (2014, April). *Pedophilia and the brain*. Invited lecture presented to the University of Toronto Medical Students lunchtime lecture. Toronto, Ontario, Canada.
31. Cantor, J. M. (2014, February). *Pedophilia and the brain: Recap and update*. Workshop presented at the 2014 annual meeting of the Washington State Association for the Treatment of Sexual Abusers, Cle Elum, WA.
32. Cantor, J. M., Lafaille, S., Hannah, J., Kucyi, A., Soh, D., Girard, T. A., & Mikulis, D. M. (2014, February). *Functional connectivity in pedophilia*. Neuropsychiatry Rounds, Toronto Western Hospital, Toronto, Ontario, Canada.

33. Cantor, J. M. (2013, November). *Understanding pedophilia and the brain: The basics, the current status, and their implications*. Invited lecture to the Forensic Psychology Research Centre, Carleton University, Ottawa, Canada.
34. Cantor, J. M. (2013, November). *Mistaking puberty, mistaking hebephilia*. Keynote address presented to the 32nd annual meeting of the Association for the Treatment of Sexual Abusers, Chicago, IL.
35. Cantor, J. M. (2013, October). *Understanding pedophilia and the brain: A recap and update*. Invited workshop presented at the 32nd annual meeting of the Association for the Treatment of Sexual Abusers, Chicago, IL.
36. Cantor, J. M. (2013, October). *Compulsive-hyper-sex-addiction: I don't care what we all it, what can we do?* Invited address presented to the Board of Examiners of Sex Therapists and Counselors of Ontario, Toronto, Ontario, Canada.
37. Cantor, J. M. (2013, September). *Neuroimaging of pedophilia: Current status and implications*. McGill University Health Centre, Department of Psychiatry Grand Rounds presentation, Montréal, Québec, Canada.
38. Cantor, J. M. (2013, April). *Understanding pedophilia and the brain*. Invited workshop presented at the 2013 meeting of the Minnesota Association for the Treatment of Sexual Abusers, Minneapolis, MN.
39. Cantor, J. M. (2013, April). *The neurobiology of pedophilia and its implications for assessment, treatment, and public policy*. Invited lecture at the 38th annual meeting of the Society for Sex Therapy and Research, Baltimore, MD.
40. Cantor, J. M. (2013, April). *Sex offenders: Relating research to policy*. Invited roundtable presentation at the annual meeting of the Academy of Criminal Justice Sciences, Dallas, TX.
41. Cantor, J. M. (2013, March). *Pedophilia and brain research: From the basics to the state-of-the-art*. Invited workshop presented to the annual meeting of the Forensic Mental Health Association of California, Monterey, CA.
42. Cantor, J. M. (2013, January). *Pedophilia and child molestation*. Invited lecture presented to the Canadian Border Services Agency, Toronto, Ontario, Canada.
43. Cantor, J. M. (2012, November). *Understanding pedophilia and sexual offenders against children: Neuroimaging and its implications for public safety*. Invited guest lecture to University of New Mexico School of Medicine Health Sciences Center, Albuquerque, NM.
44. Cantor, J. M. (2012, November). *Pedophilia and brain research*. Invited guest lecture to the annual meeting of the Circles of Support and Accountability, Toronto, Ontario, Canada.
45. Cantor, J. M. (2012, January). *Current findings on pedophilia brain research*. Invited workshop at the San Diego International Conference on Child and Family Maltreatment, San Diego, CA.
46. Cantor, J. M. (2012, January). *Pedophilia and the risk to re-offend*. Invited lecture to the Ontario Court of Justice Judicial Development Institute, Toronto, Ontario, Canada.
47. Cantor, J. M. (2011, November). *Pedophilia and the brain: What it means for assessment, treatment, and policy*. Plenary Lecture presented at the Association for the Treatment of Sexual Abusers, Toronto, Ontario, Canada.
48. Cantor, J. M. (2011, July). *Towards understanding contradictory findings in the neuroimaging of pedophilic men*. Keynote address to 7th annual conference on Research in Forensic Psychiatry, Regensburg, Germany.

49. Cantor, J. M. (2011, March). *Understanding sexual offending and the brain: Brain basics to the state of the art*. Workshop presented at the winter conference of the Oregon Association for the Treatment of Sexual Abusers, Oregon City, OR.
50. Cantor, J. M. (2010, October). *Manuscript publishing for students*. Workshop presented at the 29th annual meeting of the Association for the Treatment of Sexual Abusers, Phoenix, AZ.
51. Cantor, J. M. (2010, August). *Is sexual orientation a paraphilia?* Invited lecture at the International Behavioral Development Symposium, Lethbridge, Alberta, Canada.
52. Cantor, J. M. (2010, March). *Understanding sexual offending and the brain: From the basics to the state of the art*. Workshop presented at the annual meeting of the Washington State Association for the Treatment of Sexual Abusers, Blaine, WA.
53. Cantor, J. M. (2009, January). *Brain structure and function of pedophilia men*. Neuropsychiatry Rounds, Toronto Western Hospital, Toronto, Ontario.
54. Cantor, J. M. (2008, April). *Is pedophilia caused by brain dysfunction?* Invited address to the University-wide Science Day Lecture Series, SUNY Oswego, Oswego, NY.
55. Cantor, J. M., Kabani, N., Christensen, B. K., Zipursky, R. B., Barbaree, H. E., Dickey, R., Klassen, P. E., Mikulis, D. J., Kuban, M. E., Blak, T., Richards, B. A., Hanratty, M. K., & Blanchard, R. (2006, September). *MRIs of pedophilic men*. Invited presentation at the 25th annual meeting of the Association for the Treatment of Sexual Abusers, Chicago.
56. Cantor, J. M., Blanchard, R., & Christensen, B. K. (2003, March). *Findings in and implications of neuropsychology and epidemiology of pedophilia*. Invited lecture at the 28th annual meeting of the Society for Sex Therapy and Research, Miami.
57. Cantor, J. M., Christensen, B. K., Klassen, P. E., Dickey, R., & Blanchard, R. (2001, July). *Neuropsychological functioning in pedophiles*. Invited lecture presented at the 27th annual meeting of the International Academy of Sex Research, Bromont, Canada.
58. Cantor, J. M., Blanchard, R., Christensen, B., Klassen, P., & Dickey, R. (2001, February). *First glance at IQ, memory functioning and handedness in sex offenders*. Lecture presented at the Forensic Lecture Series, Centre for Addiction and Mental Health, Toronto, Ontario, Canada.
59. Cantor, J. M. (1999, November). *Reversal of SSRI-induced male sexual dysfunction: Suggestions from an animal model*. Grand Rounds presentation at the Allan Memorial Institute, Royal Victoria Hospital, Montréal, Canada.

PAPER PRESENTATIONS AND SYMPOSIA

1. Cantor, J. M. (2020, April). "I'd rather have a trans kid than a dead kid": Critical assessment of reported rates of suicidality in trans kids. *Paper presented at the annual meeting of the Society for the Sex Therapy and Research*. Online in lieu of in person meeting.
2. Stephens, S., Lalumière, M., Seto, M. C., & Cantor, J. M. (2017, October). *The relationship between sexual responsiveness and sexual exclusivity in phallometric profiles*. Paper presented at the annual meeting of the Canadian Sex Research Forum, Fredericton, New Brunswick, Canada.
3. Stephens, S., Cantor, J. M., & Seto, M. C. (2017, March). *Can the SSPI-2 detect hebephilic sexual interest?* Paper presented at the annual meeting of the American-Psychology Law Society Annual Meeting, Seattle, WA.
4. Stephens, S., Seto, M. C., Goodwill, A. M., & Cantor, J. M. (2015, October). *Victim choice polymorphism and recidivism*. Symposium Presentation. Paper presented at the 34th annual meeting of the Association for the Treatment of Sexual Abusers, Montréal, Canada.
5. McPhail, I. V., Hermann, C. A., Fernane, S. Fernandez, Y., Cantor, J. M., & Nunes, K. L. (2014, October). *Sexual deviance in sexual offenders against children: A meta-analytic review of phallometric research*. Paper presented at the 33rd annual meeting of the Association for the Treatment of Sexual Abusers, San Diego, CA.
6. Stephens, S., Seto, M. C., Cantor, J. M., & Goodwill, A. M. (2014, October). *Is hebephilic sexual interest a criminogenic need?: A large scale recidivism study*. Paper presented at the 33rd annual meeting of the Association for the Treatment of Sexual Abusers, San Diego, CA.
7. Stephens, S., Seto, M. C., Cantor, J. M., & Lalumière, M. (2014, October). *Development and validation of the Revised Screening Scale for Pedophilic Interests (SSPI-2)*. Paper presented at the 33rd annual meeting of the Association for the Treatment of Sexual Abusers, San Diego, CA.
8. Cantor, J. M., Lafaille, S., Hannah, J., Kucyi, A., Soh, D., Girard, T. A., & Mikulis, D. M. (2014, September). *Pedophilia and the brain: White matter differences detected with DTI*. Paper presented at the 13th annual meeting of the International Association for the Treatment of Sexual Abusers, Porto, Portugal.
9. Stephens, S., Seto, M., Cantor, J. M., Goodwill, A. M., & Kuban, M. (2014, March). *The role of hebephilic sexual interests in sexual victim choice*. Paper presented at the annual meeting of the American Psychology and Law Society, New Orleans, LA.
10. McPhail, I. V., Fernane, S. A., Hermann, C. A., Fernandez, Y. M., Nunes, K. L., & Cantor, J. M. (2013, November). *Sexual deviance and sexual recidivism in sexual offenders against children: A meta-analysis*. Paper presented at the 32nd annual meeting of the Association for the Treatment of Sexual Abusers, Chicago, IL.
11. Cantor, J. M. (2013, September). *Pedophilia and the brain: Current MRI research and its implications*. Paper presented at the 21st annual World Congress for Sexual Health, Porto Alegre, Brazil. [Featured among Best Abstracts, top 10 of 500.]
12. Cantor, J. M. (Chair). (2012, March). *Innovations in sex research*. Symposium conducted at the 37th annual meeting of the Society for Sex Therapy and Research, Chicago.
13. Cantor, J. M., & Blanchard, R. (2011, August). fMRI versus phallometry in the diagnosis of pedophilia and hebephilia. In J. M. Cantor (Chair), *Neuroimaging of men's object*

- preferences*. Symposium presented at the 37th annual meeting of the International Academy of Sex Research, Los Angeles, USA.
14. Cantor, J. M. (Chair). (2011, August). *Neuroimaging of men's object preferences*. Symposium conducted at the 37th annual meeting of the International Academy of Sex Research, Los Angeles.
 15. Cantor, J. M. (2010, October). A meta-analysis of neuroimaging studies of male sexual arousal. In S. Stolerú (Chair), *Brain processing of sexual stimuli in pedophilia: An application of functional neuroimaging*. Symposium presented at the 29th annual meeting of the Association for the Treatment of Sexual Abusers, Phoenix, AZ.
 16. Chivers, M. L., Seto, M. C., Cantor, J. C., Grimbos, T., & Roy, C. (April, 2010). *Psychophysiological assessment of sexual activity preferences in women*. Paper presented at the 35th annual meeting of the Society for Sex Therapy and Research, Boston, USA.
 17. Cantor, J. M., Girard, T. A., & Lovett-Barron, M. (2008, November). *The brain regions that respond to erotica: Sexual neuroscience for dummies*. Paper presented at the 51st annual meeting of the Society for the Scientific Study of Sexuality, San Juan, Puerto Rico.
 18. Barbaree, H., Langton, C., Blanchard, R., & Cantor, J. M. (2007, October). *The role of age-at-release in the evaluation of recidivism risk of sexual offenders*. Paper presented at the 26th annual meeting of the Association for the Treatment of Sexual Abusers, San Diego.
 19. Cantor, J. M., Kabani, N., Christensen, B. K., Zipursky, R. B., Barbaree, H. E., Dickey, R., Klassen, P. E., Mikulis, D. J., Kuban, M. E., Blak, T., Richards, B. A., Hanratty, M. K., & Blanchard, R. (2006, July). *Pedophilia and brain morphology*. Abstract and paper presented at the 32nd annual meeting of the International Academy of Sex Research, Amsterdam, Netherlands.
 20. Seto, M. C., Cantor, J. M., & Blanchard, R. (2006, March). *Child pornography offending is a diagnostic indicator of pedophilia*. Paper presented at the 2006 annual meeting of the American Psychology-Law Society Conference, St. Petersburg, Florida.
 21. Blanchard, R., Cantor, J. M., Bogaert, A. F., Breedlove, S. M., & Ellis, L. (2005, August). *Interaction of fraternal birth order and handedness in the development of male homosexuality*. Abstract and paper presented at the International Behavioral Development Symposium, Minot, North Dakota.
 22. Cantor, J. M., & Blanchard, R. (2005, July). *Quantitative reanalysis of aggregate data on IQ in sexual offenders*. Abstract and poster presented at the 31st annual meeting of the International Academy of Sex Research, Ottawa, Canada.
 23. Cantor, J. M. (2003, August). *Sex reassignment on demand: The clinician's dilemma*. Paper presented at the 111th annual meeting of the American Psychological Association, Toronto, Canada.
 24. Cantor, J. M. (2003, June). *Meta-analysis of VIQ-PIQ differences in male sex offenders*. Paper presented at the Harvey Stancer Research Day, Toronto, Ontario, Canada.
 25. Cantor, J. M. (2002, August). *Gender role in autogynephilic transsexuals: The more things change...* Paper presented at the 110th annual meeting of the American Psychological Association, Chicago.

26. Cantor, J. M., Christensen, B. K., Klassen, P. E., Dickey, R., & Blanchard, R. (2001, June). *IQ, memory functioning, and handedness in male sex offenders*. Paper presented at the Harvey Stancer Research Day, Toronto, Ontario, Canada.
27. Cantor, J. M. (1998, August). *Convention orientation for lesbian, gay, and bisexual students*. Papers presented at the 106th annual meeting of the American Psychological Association.
28. Cantor, J. M. (1997, August). *Discussion hour for lesbian, gay, and bisexual students*. Presented at the 105th annual meeting of the American Psychological Association.
29. Cantor, J. M. (1997, August). *Convention orientation for lesbian, gay, and bisexual students*. Paper presented at the 105th annual meeting of the American Psychological Association.
30. Cantor, J. M. (1996, August). *Discussion hour for lesbian, gay, and bisexual students*. Presented at the 104th annual meeting of the American Psychological Association.
31. Cantor, J. M. (1996, August). *Symposium: Question of inclusion: Lesbian and gay psychologists and accreditation*. Paper presented at the 104th annual meeting of the American Psychological Association, Toronto.
32. Cantor, J. M. (1996, August). *Convention orientation for lesbian, gay, and bisexual students*. Papers presented at the 104th annual meeting of the American Psychological Association.
33. Cantor, J. M. (1995, August). *Discussion hour for lesbian, gay, and bisexual students*. Presented at the 103rd annual meeting of the American Psychological Association.
34. Cantor, J. M. (1995, August). *Convention orientation for lesbian, gay, and bisexual students*. Papers presented at the 103rd annual meeting of the American Psychological Association.
35. Cantor, J. M. (1994, August). *Discussion hour for lesbian, gay, and bisexual students*. Presented at the 102nd annual meeting of the American Psychological Association.
36. Cantor, J. M. (1994, August). *Convention orientation for lesbian, gay, and bisexual students*. Papers presented at the 102nd annual meeting of the American Psychological Association.
37. Cantor, J. M., & Pilkington, N. W. (1992, August). *Homophobia in psychology programs: A survey of graduate students*. Paper presented at the Centennial Convention of the American Psychological Association, Washington, DC. (ERIC Document Reproduction Service No. ED 351 618)
38. Cantor, J. M. (1991, August). *Being gay and being a graduate student: Double the memberships, four times the problems*. Paper presented at the 99th annual meeting of the American Psychological Association, San Francisco.

POSTER PRESENTATIONS

1. Klein, L., Stephens, S., Goodwill, A. M., Cantor, J. M., & Seto, M. C. (2015, October). *The psychological propensities of risk in undetected sexual offenders*. Poster presented at the 34th annual meeting of the Association for the Treatment of Sexual Abusers, Montréal, Canada.
2. Pullman, L. E., Stephens, S., Seto, M. C., Goodwill, A. M., & Cantor, J. M. (2015, October). *Why are incest offenders less likely to recidivate?* Poster presented at the 34th annual meeting of the Association for the Treatment of Sexual Abusers, Montréal, Canada.
3. Seto, M. C., Stephens, S. M., Cantor, J. M., Lalumière, M. L., Sandler, J. C., & Freeman, N. A. (2015, August). *The development and validation of the Revised Screening Scale for Pedophilic Interests (SSPI-2)*. Poster presentation at the 41st annual meeting of the International Academy of Sex Research. Toronto, Canada.
4. Soh, D. W., & Cantor, J. M. (2015, August). *A peek inside a furry convention*. Poster presentation at the 41st annual meeting of the International Academy of Sex Research. Toronto, Canada.
5. VanderLaan, D. P., Lobaugh, N. J., Chakravarty, M. M., Patel, R., Chavez, S. Stojanovski, S. O., Takagi, A., Hughes, S. K., Wasserman, L., Bain, J., Cantor, J. M., & Zucker, K. J. (2015, August). *The neurohormonal hypothesis of gender dysphoria: Preliminary evidence of cortical surface area differences in adolescent natal females*. Poster presentation at the 31st annual meeting of the International Academy of Sex Research. Toronto, Canada.
6. Cantor, J. M., Lafaille, S. J., Moayed, M., Mikulis, D. M., & Girard, T. A. (2015, June). *Diffusion tensor imaging (DTI) of the brain in pedohebephilic men: Preliminary analyses*. Harvey Stancer Research Day, Toronto, Ontario Canada.
7. Newman, J. E., Stephens, S., Seto, M. C., & Cantor, J. M. (2014, October). *The validity of the Static-99 in sexual offenders with low intellectual abilities*. Poster presentation at the 33rd annual meeting of the Association for the Treatment of Sexual Abusers, San Diego, CA.
8. Lykins, A. D., Walton, M. T., & Cantor, J. M. (2014, June). *An online assessment of personality, psychological, and sexuality trait variables associated with self-reported hypersexual behavior*. Poster presentation at the 30th annual meeting of the International Academy of Sex Research, Dubrovnik, Croatia.
9. Stephens, S., Seto, M. C., Cantor, J. M., Goodwill, A. M., & Kuban, M. (2013, November). *The utility of phallometry in the assessment of hebephilia*. Poster presented at the 32nd annual meeting of the Association for the Treatment of Sexual Abusers, Chicago.
10. Stephens, S., Seto, M. C., Cantor, J. M., Goodwill, A. M., & Kuban, M. (2013, October). *The role of hebephilic sexual interests in sexual victim choice*. Poster presented at the 32nd annual meeting of the Association for the Treatment of Sexual Abusers, Chicago.
11. Fazio, R. L., & Cantor, J. M. (2013, October). *Analysis of the Fazio Laterality Inventory (FLI) in a population with established atypical handedness*. Poster presented at the 33rd annual meeting of the National Academy of Neuropsychology, San Diego.
12. Lafaille, S., Hannah, J., Soh, D., Kucyi, A., Girard, T. A., Mikulis, D. M., & Cantor, J. M. (2013, August). *Investigating resting state networks in pedohebephiles*. Poster presented at the 29th annual meeting of the International Academy of Sex Research, Chicago.

13. McPhail, I. V., Lykins, A. D., Robinson, J. J., LeBlanc, S., & Cantor, J. M. (2013, August). *Effects of prescription medication on volumetric phallometry output*. Poster presented at the 29th annual meeting of the International Academy of Sex Research, Chicago.
14. Murray, M. E., Dyshniku, F., Fazio, R. L., & Cantor, J. M. (2013, August). *Minor physical anomalies as a window into the prenatal origins of pedophilia*. Poster presented at the 29th annual meeting of the International Academy of Sex Research, Chicago.
15. Sutton, K. S., Stephens, S., Dyshniku, F., Tulloch, T., & Cantor, J. M. (2013, August). *Pilot group treatment for "procrasturbation."* Poster presented at 39th annual meeting of the International Academy of Sex Research, Chicago.
16. Sutton, K. S., Pytyck, J., Stratton, N., Sylva, D., Kolla, N., & Cantor, J. M. (2013, August). *Client characteristics by type of hypersexuality referral: A quantitative chart review*. Poster presented at the 39th annual meeting of the International Academy of Sex Research, Chicago.
17. Fazio, R. L., & Cantor, J. M. (2013, June). *A replication and extension of the psychometric properties of the Digit Vigilance Test*. Poster presented at the 11th annual meeting of the American Academy of Clinical Neuropsychology, Chicago.
18. Lafaille, S., Moayed, M., Mikulis, D. M., Girard, T. A., Kuban, M., Blak, T., & Cantor, J. M. (2012, July). *Diffusion Tensor Imaging (DTI) of the brain in pedohebephilic men: Preliminary analyses*. Poster presented at the 38th annual meeting of the International Academy of Sex Research, Lisbon, Portugal.
19. Lykins, A. D., Cantor, J. M., Kuban, M. E., Blak, T., Dickey, R., Klassen, P. E., & Blanchard, R. (2010, July). *Sexual arousal to female children in gynephilic men*. Poster presented at the 38th annual meeting of the International Academy of Sex Research, Prague, Czech Republic.
20. Cantor, J. M., Girard, T. A., Lovett-Barron, M., & Blak, T. (2008, July). *Brain regions responding to visual sexual stimuli: Meta-analysis of PET and fMRI studies*. Abstract and poster presented at the 34th annual meeting of the International Academy of Sex Research, Leuven, Belgium.
21. Lykins, A. D., Blanchard, R., Cantor, J. M., Blak, T., & Kuban, M. E. (2008, July). *Diagnosing sexual attraction to children: Considerations for DSM-V*. Poster presented at the 34th annual meeting of the International Academy of Sex Research, Leuven, Belgium.
22. Cantor, J. M., Blak, T., Kuban, M. E., Klassen, P. E., Dickey, R. and Blanchard, R. (2007, October). *Physical height in pedophilia and hebephilia*. Poster presented at the 26th annual meeting of the Association for the Treatment of Sexual Abusers, San Diego.
23. Cantor, J. M., Blak, T., Kuban, M. E., Klassen, P. E., Dickey, R. and Blanchard, R. (2007, August). *Physical height in pedophilia and hebephilia*. Abstract and poster presented at the 33rd annual meeting of the International Academy of Sex Research, Vancouver, Canada.
24. Puts, D. A., Blanchard, R., Cardenas, R., Cantor, J., Jordan, C. L., & Breedlove, S. M. (2007, August). *Earlier puberty predicts superior performance on male-biased visuospatial tasks in men but not women*. Abstract and poster presented at the 33rd annual meeting of the International Academy of Sex Research, Vancouver, Canada.
25. Seto, M. C., Cantor, J. M., & Blanchard, R. (2005, November). *Possession of child pornography is a diagnostic indicator of pedophilia*. Poster presented at the 24th annual meeting of the Association for the Treatment of Sexual Abusers, New Orleans.

26. Blanchard, R., Cantor, J. M., Bogaert, A. F., Breedlove, S. M., & Ellis, L. (2005, July). *Interaction of fraternal birth order and handedness in the development of male homosexuality*. Abstract and poster presented at the 31st annual meeting of the International Academy of Sex Research, Ottawa, Canada.
27. Cantor, J. M., & Blanchard, R. (2003, July). *The reported VIQ–PIQ differences in male sex offenders are artifactual?* Abstract and poster presented at the 29th annual meeting of the International Academy of Sex Research, Bloomington, Indiana.
28. Christensen, B. K., Cantor, J. M., Millikin, C., & Blanchard, R. (2002, February). *Factor analysis of two brief memory tests: Preliminary evidence for modality-specific measurement*. Poster presented at the 30th annual meeting of the International Neuropsychological Society, Toronto, Ontario, Canada.
29. Cantor, J. M., Blanchard, R., Paterson, A., Bogaert, A. (2000, June). *How many gay men owe their sexual orientation to fraternal birth order?* Abstract and poster presented at the International Behavioral Development Symposium, Minot, North Dakota.
30. Cantor, J. M., Binik, Y., & Pfaus, J. G. (1996, November). *Fluoxetine inhibition of male rat sexual behavior: Reversal by oxytocin*. Poster presented at the 26th annual meeting of the Society for Neurosciences, Washington, DC.
31. Cantor, J. M., Binik, Y., & Pfaus, J. G. (1996, June). *An animal model of fluoxetine-induced sexual dysfunction: Dose dependence and time course*. Poster presented at the 28th annual Conference on Reproductive Behavior, Montréal, Canada.
32. Cantor, J. M., O'Connor, M. G., Kaplan, B., & Cermak, L. S. (1993, June). *Transient events test of retrograde memory: Performance of amnesic and unimpaired populations*. Poster presented at the 2nd annual science symposium of the Massachusetts Neuropsychological Society, Cambridge, MA.

EDITORIAL AND PEER-REVIEWING ACTIVITIES

Editor-in-Chief

Sexual Abuse: A Journal of Research and Treatment

Jan., 2010–Dec., 2014

Editorial Board Memberships

Journal of Sexual Aggression

Jan., 2010–Dec., 2021

Journal of Sex Research, The

Jan., 2008–Aug., 2020

Sexual Abuse: A Journal of Research and Treatment

Jan., 2006–Dec., 2019

Archives of Sexual Behavior

Jan., 2004–Present

The Clinical Psychologist

Jan., 2004–Dec., 2005

Ad hoc Journal Reviewer Activity

American Journal of Psychiatry

Annual Review of Sex Research

Archives of General Psychiatry

Assessment

Biological Psychiatry

BMC Psychiatry

Brain Structure and Function

British Journal of Psychiatry

British Medical Journal

Canadian Journal of Behavioural Science

Canadian Journal of Psychiatry

Cerebral Cortex

Clinical Case Studies

Comprehensive Psychiatry

Developmental Psychology

European Psychologist

Frontiers in Human Neuroscience

Human Brain Mapping

International Journal of Epidemiology

International Journal of Impotence Research

International Journal of Sexual Health

International Journal of Transgenderism

Journal of Abnormal Psychology

Journal of Clinical Psychology

Journal of Consulting and Clinical Psychology

Journal of Forensic Psychology Practice

Journal for the Scientific Study of Religion

Journal of Sexual Aggression

Journal of Sexual Medicine

Journal of Psychiatric Research

Nature Neuroscience

Neurobiology Reviews

Neuroscience & Biobehavioral Reviews

Neuroscience Letters

*Proceedings of the Royal Society B
(Biological Sciences)*

Psychological Assessment

Psychological Medicine

Psychological Science

Psychology of Men & Masculinity

Sex Roles

Sexual and Marital Therapy

Sexual and Relationship Therapy

Sexuality & Culture

Sexuality Research and Social Policy

The Clinical Psychologist

Traumatology

World Journal of Biological Psychiatry

GRANT REVIEW PANELS

2017–2021	Member, College of Reviewers, <i>Canadian Institutes of Health Research</i> , Canada.
2017	Committee Member, Peer Review Committee—Doctoral Research Awards A. <i>Canadian Institutes of Health Research</i> , Canada.
2017	Member, International Review Board, Research collaborations on behavioural disorders related to violence, neglect, maltreatment and abuse in childhood and adolescence. <i>Bundesministerium für Bildung und Forschung [Ministry of Education and Research]</i> , Germany.
2016	Reviewer. National Science Center [<i>Narodowe Centrum Nauki</i>], Poland.
2016	Committee Member, Peer Review Committee—Doctoral Research Awards A. <i>Canadian Institutes of Health Research</i> , Canada.
2015	Assessor (Peer Reviewer). Discovery Grants Program. <i>Australian Research Council</i> , Australia.
2015	Reviewer. <i>Czech Science Foundation</i> , Czech Republic.
2015	Reviewer, “Off the beaten track” grant scheme. <i>Volkswagen Foundation</i> , Germany.
2015	External Reviewer, Discovery Grants program—Biological Systems and Functions. <i>National Sciences and Engineering Research Council of Canada</i> , Canada
2015	Committee Member, Peer Review Committee—Doctoral Research Awards A. <i>Canadian Institutes of Health Research</i> , Canada.
2014	Assessor (Peer Reviewer). Discovery Grants Program. <i>Australian Research Council</i> , Australia.
2014	External Reviewer, Discovery Grants program—Biological Systems and Functions. <i>National Sciences and Engineering Research Council of Canada</i> , Canada.
2014	Panel Member, Dean’s Fund—Clinical Science Panel. <i>University of Toronto Faculty of Medicine</i> , Canada.
2014	Committee Member, Peer Review Committee—Doctoral Research Awards A. <i>Canadian Institutes of Health Research</i> , Canada.
2013	Panel Member, Grant Miller Cancer Research Grant Panel. <i>University of Toronto Faculty of Medicine</i> , Canada.

- 2013 Panel Member, Dean of Medicine Fund New Faculty Grant Clinical Science Panel. *University of Toronto Faculty of Medicine*, Canada.
- 2012 Board Member, International Review Board, Research collaborations on behavioural disorders related to violence, neglect, maltreatment and abuse in childhood and adolescence (2nd round). *Bundesministerium für Bildung und Forschung [Ministry of Education and Research]*, Germany.
- 2012 External Reviewer, University of Ottawa Medical Research Fund. *University of Ottawa Department of Psychiatry*, Canada.
- 2012 External Reviewer, Behavioural Sciences—B. *Canadian Institutes of Health Research*, Canada.
- 2011 Board Member, International Review Board, Research collaborations on behavioural disorders related to violence, neglect, maltreatment and abuse in childhood and adolescence. *Bundesministerium für Bildung und Forschung [Ministry of Education and Research]*, Germany.

TEACHING AND TRAINING

PostDoctoral Research Supervision

Law & Mental Health Program, Centre for Addiction and Mental Health, Toronto, Canada

Dr. Katherine S. Sutton	Sept., 2012–Dec., 2013
Dr. Rachel Fazio	Sept., 2012–Aug., 2013
Dr. Amy Lykins	Sept., 2008–Nov., 2009

Doctoral Research Supervision

Centre for Addiction and Mental Health, Toronto, Canada

Michael Walton • University of New England, Australia	Sept., 2017–Aug., 2018
Debra Soh • York University	May, 2013–Aug., 2017
Skye Stephens • Ryerson University	April, 2012–June, 2016

Masters Research Supervision

Centre for Addiction and Mental Health, Toronto, Canada

Nicole Cormier • Ryerson University	June, 2012–present
Debra Soh • Ryerson University	May, 2009–April, 2010

Undergraduate Research Supervision

Centre for Addiction and Mental Health, Toronto, Canada

Kylie Reale • Ryerson University	Spring, 2014
Jarrett Hannah • University of Rochester	Summer, 2013
Michael Humeniuk • University of Toronto	Summer, 2012

Clinical Supervision (Doctoral Internship)

Clinical Internship Program, Centre for Addiction and Mental Health, Toronto, Canada

Katherine S. Sutton • Queen's University	2011–2012
David Sylva • Northwestern University	2011–2012
Jordan Rullo • University of Utah	2010–2011
Lea Thaler • University of Nevada, Las Vegas	2010–2011
Carolyn Klein • University of British Columbia	2009–2010
Bobby R. Walling • University of Manitoba	2009–2010

TEACHING AND TRAINING

Clinical Supervision (Doctoral- and Masters- level practica) Centre for Addiction and Mental Health, Toronto, Canada

Tyler Tulloch • Ryerson University	2013–2014
Natalie Stratton • Ryerson University	Summer, 2013
Fiona Dyshniku • University of Windsor	Summer, 2013
Mackenzie Becker • McMaster University	Summer, 2013
Skye Stephens • Ryerson University	2012–2013
Vivian Nyantakyi • Capella University	2010–2011
Cailey Hartwick • University of Guelph	Fall, 2010
Tricia Teeft • Humber College	Summer, 2010
Allison Reeves • Ontario Institute for Studies in Education/Univ. of Toronto	2009–2010
Helen Bailey • Ryerson University	Summer, 2009
Edna Aryee • Ontario Institute for Studies in Education/Univ. of Toronto	2008–2009
Iryna Ivanova • Ontario Institute for Studies in Education/Univ. of Toronto	2008–2009
Jennifer Robinson • Ontario Institute for Studies in Education/Univ. of Toronto	2008–2009
Zoë Laksman • Adler School of Professional Psychology	2005–2006
Diana Mandelew • Adler School of Professional Psychology	2005–2006
Susan Wnuk • York University	2004–2005
Hiten Lad • Adler School of Professional Psychology	2004–2005
Natasha Williams • Adler School of Professional Psychology	2003–2004
Lisa Couperthwaite • Ontario Institute for Studies in Education/Univ. of Toronto	2003–2004
Lori Gray, née Robichaud • University of Windsor	Summer, 2003
Sandra Belfry • Ontario Institute for Studies in Education/Univ. of Toronto	2002–2003
Althea Monteiro • York University	Summer, 2002
Samantha Dworsky • York University	2001–2002
Kerry Collins • University of Windsor	Summer, 2001
Jennifer Fogarty • Waterloo University	2000–2001
Emily Cripps • Waterloo University	Summer, 2000
Lee Beckstead • University of Utah	2000

PROFESSIONAL SOCIETY ACTIVITIES

OFFICES HELD

2018–2019	Local Host. Society for Sex Therapy and Research.
2015	Member, International Scientific Committee, World Association for Sexual Health.
2015	Member, Program Planning and Conference Committee, Association for the Treatment of Sexual Abusers
2012–2013	Chair, Student Research Awards Committee, Society for Sex Therapy & Research
2012–2013	Member, Program Planning and Conference Committee, Association for the Treatment of Sexual Abusers
2011–2012	Chair, Student Research Awards Committee, Society for Sex Therapy & Research
2010–2011	Scientific Program Committee, International Academy of Sex Research
2002–2004	Membership Committee • APA Division 12 (Clinical Psychology)
2002–2003	Chair, Committee on Science Issues, APA Division 44
2002	Observer, Grant Review Committee • Canadian Institutes of Health Research Behavioural Sciences (B)
2001–2009	Reviewer • APA Division 44 Convention Program Committee
2001, 2002	Reviewer • APA Malyon-Smith Scholarship Committee
2000–2005	Task Force on Transgender Issues, APA Division 44
1998–1999	Consultant, APA Board of Directors Working Group on Psychology Marketplace
1997	Student Representative • APA Board of Professional Affairs' Institute on TeleHealth
1997–1998	Founder and Chair • APA/APAGS Task Force on New Psychologists' Concerns
1997–1999	Student Representative • APA/CAPP Sub-Committee for a National Strategy for Prescription Privileges
1997–1999	Liaison • APA Committee for the Advancement of Professional Practice
1997–1998	Liaison • APA Board of Professional Affairs
1993–1997	Founder and Chair • APA/APAGS Committee on LGB Concerns

PROFESSIONAL SOCIETY ACTIVITIES

MEMBERSHIPS

2017–2021 Member • *Canadian Sex Research Forum*

2009–Present Member • *Society for Sex Therapy and Research*

2006–Present Member (elected) • *International Academy of Sex Research*

2006–Present Research and Clinical Member • *Association for the Treatment of Sex Abusers*

2003–2006 Associate Member (elected) • *International Academy of Sex Research*

2002 Founding Member • CPA Section on Sexual Orientation and Gender Identity

2001–2013 Member • *Canadian Psychological Association (CPA)*

2000–2015 Member • *American Association for the Advancement of Science*

2000–2015 Member • *American Psychological Association (APA)*

APA Division 12 (Clinical Psychology)

APA Division 44 (Society for the Psychological Study of LGB Issues)

2000–2020 Member • *Society for the Scientific Study of Sexuality*

1995–2000 Student Member • *Society for the Scientific Study of Sexuality*

1993–2000 Student Affiliate • *American Psychological Association*

1990–1999 Member, American Psychological Association of Graduate Students (APAGS)

CLINICAL LICENSURE/REGISTRATION

Certificate of Registration, Number 3793
College of Psychologists of Ontario, Ontario, Canada

AWARDS AND HONORS

2017 Elected Fellow, Association for the Treatment of Sexual Abusers

2011 Howard E. Barbaree Award for Excellence in Research
Centre for Addiction and Mental Health, Law and Mental Health Program

2004 fMRI Visiting Fellowship Program at Massachusetts General Hospital
American Psychological Association Advanced Training Institute and NIH

1999–2001 CAMH Post-Doctoral Research Fellowship
Centre for Addiction and Mental Health Foundation and Ontario Ministry of Health

1998 Award for Distinguished Contribution by a Student
American Psychological Association, Division 44

1995 Dissertation Research Grant
Society for the Scientific Study of Sexuality

1994–1996 McGill University Doctoral Scholarship

1994 Award for Outstanding Contribution to Undergraduate Teaching
“TA of the Year Award,” from the McGill Psychology Undergraduate Student Association

MAJOR MEDIA

(Complete list available upon request.)

Feature-length Documentaries

Vice Canada Reports. Age of Consent. 14 Jan 2017.

Canadian Broadcasting Company. I, Pedophile. Firsthand documentaries. 10 Mar 2016.

Appearances and Interviews

11 Mar 2020. Ibbitson, John. It is crucial that Parliament gets the conversion-therapy ban right. *The Globe & Mail*.

25 Jan 2020. Ook de hulpvaardige buurman kan verzamelaar van kinderporno zin. *De Morgen*.

3 Nov 2019. Village of the damned. *60 Minutes Australia*.

1 Nov 2019. HÅKON F. HØYDAL. Norsk nettovergreper: – Jeg hater meg selv: Nordmennene laster ned overgrepsmateriale fra nettet – og oppfordrer politiet til å gi amnesti for slike som ham.

10 Oct 2019. Smith, T. Growing efforts are looking at how—or if—#MeToo offenders can be reformed. *National Public Radio*.

29 Sep 2019. Carey, B. Preying on Children: The Emerging Psychology of Pedophiles. *New York Times*.

29 Apr 2019. Mathieu, Isabelle. La poupée qui a troublé les Terre-Neuviens. *La Tribune*.

21 Mar 2019. Pope Francis wants psychological testing to prevent problem priests. But can it really do that? *The Washington Post*.

12 Dec 2018. Child sex dolls: Illegal in Canada, and dozens seized at the border. Ontario Today with Rita Celli. *CBC*.

12 Dec 2018. Celli, R. & Harris, K. Dozens of child sex dolls seized by Canadian border agents. *CBC News*.

27 Apr 2018. Rogers, Brook A. The online ‘incel’ culture is real—and dangerous. *New York Post*.

25 Apr 2018. Yang, J. Number cited in cryptic Facebook post matches Alek Minassian’s military ID: Source. *Toronto Star*.

24 Apr 2018 Understanding ‘incel’. *CTV News*.

27 Nov 2017. Carey, B. Therapy for Sexual Misconduct? It’s Mostly Unproven. *New York Times*.

14 Nov 2017. Tremonti, A. M. The Current. *CBC*.

9 Nov 2017. Christensen, J. Why men use masturbation to harass women. *CNN*.
<http://www.cnn.com/2017/11/09/health/masturbation-sexual-harassment/index.html>

7 Nov 2017. Nazaryan, A. Why is the alt-right obsessed with pedophilia? *Newsweek*.

15 Oct 2017. Ouatik, B. Découvrir. Pédophilie et science. *CBC Radio Canada*.

12 Oct 2017. Ouatik, B. Peut-on guérir la pédophilie? *CBC Radio Canada*.

11 Sep 2017. Burns, C. The young paedophiles who say they don’t abuse children. *BBC News*.

18 Aug 2017. Interview. *National Post Radio*. Sirius XM Canada.

16 Aug 2017. Blackwell, Tom. Man says he was cured of pedophilia at Ottawa clinic: ‘It’s like a weight that’s been lifted’: But skeptics worry about the impact of sending pedophiles into the world convinced their curse has been vanquished. *National Post*.

26 Apr 2017. Zalkind, S. Prep schools hid sex abuse just like the catholic church. *VICE*.

24 Apr 2017. Sastre, P. Pédophilie: une panique morale jamais n’abolira un crime. *Slate France*.

12 Feb 2017. Payette, G. Child sex doll trial opens Pandora’s box of questions. *CBC News*.

26 Nov 2016. Det morke uvetet [“The unknown darkness”]. *Fedrelandsvennen*.

13 July 2016. Paedophilia: Shedding light on the dark field. *The Economist*.

- 1 Jul 2016. Debusschere, B. Niet iedereen die kinderporno kijkt, is een pedofiel: De mythes rond pedofilie ontkracht. *De Morgen*.
- 12 Apr 2016. O'Connor, R. Terence Martin: The Tasmanian MP whose medication 'turned him into a paedophile'. *The Independent*.
- 8 Mar 2016. Bielski, Z. 'The most viscerally hated group on earth': Documentary explores how intervention can stop pedophiles. *The Globe and Mail*.
- 1 Mar 2016. Elmhirst, S. What should we do about paedophiles? *The Guardian*.
- 24 Feb 2016. The man whose brain tumour 'turned him into a paedophile'. *The Independent*.
- 24 Nov 2015. Byron, T. The truth about child sex abuse. *BBC Two*.
- 20 Aug 2015. The Jared Fogle case: Why we understand so little about abuse. *Washington Post*.
- 19 Aug 2015. Blackwell, T. Treat sex offenders for impotence—to keep them out of trouble, Canadian psychiatrist says. *National Post*.
- 2 Aug 2015. Menendez, J. BBC News Hour. *BBC World Service*.
- 13 Jul 2015. The nature of pedophilia. *BBC Radio 4*.
- 9 Jul 2015. The sex-offender test: How a computerized assessment can help determine the fate of men who've been accused of sexually abusing children. *The Atlantic*.
- 10 Apr 2015. NWT failed to prevent sex offender from abusing stepdaughter again. *CBC News*.
- 10 Feb 2015. Savage, D. "The ethical sadist." In *Savage Love.* *The Stranger*.
- 31 Jan 2015. Begrip voor/van pedofilie [Understanding pedophilia]. *de Volkskrant*.
- 9 Dec 2014. Carey, B. When a rapist's weapon is a pill. *New York Times*.
- 1 Dec 2014. Singal, J. Can virtual reality help pedophiles? *New York Magazine*.
- 17 Nov 2014. Say pedófile, busco aydua. *El Pais*.
- 4 Sep 2014. Born that way? *Ideas, with Paul Kennedy.* *CBC Radio One*.
- 27 Aug 2014. Interrogating the statistics for the prevalence of paedophilia. *BBC*.
- 25 Jul 2014. Stephenson, W. The prevalence of paedophilia. *BBC World Service*.
- 21 Jul 2014. Hildebrandt, A. Virtuous Pedophiles group gives support therapy cannot. *CBC*.
- 26 Jan 2014. Paedophilia a result of faulty wiring, scientists suggest. *Daily Mail*.
- 22 Dec 2013. Kane, L. Is pedophilia a sexual orientation? *Toronto Star*.
- 21 Jul 2013. Miller, L. The turn-on switch: Fetish theory, post-Freud. *New York Magazine*.
- 1 Jul 2013. Morin, H. Pédophilie: la difficile quête d'une origine biologique. *Le Monde*.
- 2 Jun 2013. Malcolm, L. The psychology of paedophilia. *Australian National Radio*.
- 1 Mar 2013. Kay, J. The mobbing of Tom Flanagan is unwarranted and cruel. *National Post*.
- 6 Feb 2013. Boy Scouts board delays vote on lifting ban on gays. *L.A. Times*.
- 31 Aug 2012. CNN Newsroom interview with Ashleigh Banfield. *CNN*.
- 24 Jun 2012. CNN Newsroom interview with Don Lemon. *CNN*.

LEGAL TESTIMONY, PAST 5 YEARS

2021	Cross et al. v Loudoun School Board	Loudoun, VA
2021	Allan M. Josephson v Neeli Bendapudi	Western District of Kentucky
2021	Re Commitment of Michael Hughes (Frye Hearing)	Cook County, Illinois
2019	US vs Peter Bright	Southern District of New York, NY
2019	Probate and Family Court (Custody Hearing)	Boston, Massachusetts
2019	Re Commitment of Steven Casper (Frye Hearing)	Kendall County, Illinois
2019	Re Commitment of Inger (Frye Hearing)	Poughkeepsie, NY
2018	Re Commitment of Fernando Little (Frye Hearing)	Utica, NY
2018	Canada vs John Fitzpatrick (Sentencing Hearing)	Toronto, Ontario, Canada

EXPERT REPORT OF JAMES M. CANTOR, PHD

APPENDIX 2



Transgender and Gender Diverse Children and Adolescents: Fact-Checking of AAP Policy

James M. Cantor

Toronto Sexuality Centre, Toronto, Canada

ABSTRACT

The American Academy of Pediatrics (AAP) recently published a policy statement: *Ensuring comprehensive care and support for transgender and gender-diverse children and adolescents*. Although almost all clinics and professional associations in the world use what's called the *watchful waiting* approach to helping gender diverse (GD) children, the AAP statement instead rejected that consensus, endorsing *gender affirmation* as the only acceptable approach. Remarkably, not only did the AAP statement fail to include any of the actual outcomes literature on such cases, but it also misrepresented the contents of its citations, which repeatedly said the very opposite of what AAP attributed to them.

The American Academy of Pediatrics (AAP) recently published a policy statement entitled, *Ensuring comprehensive care and support for transgender and gender-diverse children and adolescents* (Rafferty, AAP Committee on Psychosocial Aspects of Child and Family Health, AAP Committee on Adolescence, AAP Section on Lesbian, Gay, Bisexual, and Transgender Health and Wellness, 2018). These are children who manifest discontent with the sex they were born as and desire to live as the other sex (or as some alternative gender role). The policy was quite a remarkable document: Although almost all clinics and professional associations in the world use what's called the *watchful waiting* approach to helping transgender and gender diverse (GD) children, the AAP statement rejected that consensus, endorsing only *gender affirmation*. That is, where the consensus is to delay any transitions after the onset of puberty, AAP instead rejected waiting before transition. With AAP taking such a dramatic departure from other professional associations, I was immediately curious about what evidence led them to that conclusion. As I read the works on which they based their policy, however, I was pretty surprised—rather alarmed, actually: These documents simply did not say what AAP claimed they did. In fact, the references that AAP cited as the basis of their policy instead outright contradicted that policy, repeatedly endorsing *watchful waiting*.

The AAP statement was also remarkable in what it left out—namely, the actual outcomes research on GD children. In total, there have been 11 follow-up studies of GD children, of which AAP cited one (Wallien & Cohen-Kettenis, 2008), doing so without actually mentioning the outcome data it contained. The literature on outcomes was neither reviewed, summarized, nor subjected to meta-analysis to be considered in the aggregate—It was merely disappeared. (The list of all existing studies appears in the appendix.) As they make clear, *every* follow-up study of GD children, without exception, found the same thing: Over puberty, the majority of GD children cease to want to transition. AAP is, of course, free to establish whatever policy it likes on

whatever basis it likes. But any assertion that their policy is based on evidence is demonstrably false, as detailed below.

AAP divided clinical approaches into three types—conversion therapy, watchful waiting, and gender affirmation. It rejected the first two and endorsed *gender affirmation* as the only acceptable alternative. Most readers will likely be familiar already with attempts to use conversion therapy to change sexual orientation. With regard to gender identity, AAP wrote:

“[C]onversion” or “reparative” treatment models are used to prevent children and adolescents from identifying as transgender or to dissuade them from exhibiting gender-diverse expressions. ... Reparative approaches have been proven to be not only unsuccessful³⁸ but also deleterious and are considered outside the mainstream of traditional medical practice.^{29,39–42}

The citations were:

38. Haldeman DC. The practice and ethics of sexual orientation conversion therapy. *J Consult Clin Psychol.* 1994;62(2):221–227.
29. Adelson SL; American Academy of Child and Adolescent Psychiatry (AACAP) Committee on Quality Issues (CQI). Practice parameter on gay, lesbian, or bisexual sexual orientation, gender nonconformity, and gender discordance in children and adolescents. *J Am Acad Child Adolesc Psychiatry.* 2012;51(9):957–974.
39. Byne W. Regulations restrict practice of conversion therapy. *LGBT Health.* 2016;3(2):97–99.
40. Cohen-Kettenis PT, Delemarre van de Waal HA, Gooren LJ. The treatment of adolescent transsexuals: changing insights. *J Sex Med.* 2008;5(8):1892–1897.
41. Bryant K. Making gender identity disorder of childhood: historical lessons for contemporary debates. *Sex Res Soc Policy.* 2006;3(3):23–39.
42. World Professional Association for Transgender Health. *WPATH De-Psychopathologisation Statement.* Minneapolis, MN: World Professional Association for Transgender Health; 2010.

AAP’s claims struck me as odd because *there are no studies of conversion therapy for gender identity*. Studies of conversion therapy have been limited to *sexual orientation*, and, moreover, to the sexual orientation of *adults*, not to gender identity and not of children in any case. The article AAP cited to support their claim (reference number 38) is indeed a classic and well-known review, but it is a review of sexual orientation research *only*. Neither gender identity, nor even children, received a single mention in it. Indeed, the narrower scope of that article should be clear to anyone reading even just its title: “The practice and ethics of *sexual orientation* conversion therapy” [italics added].

AAP continued, saying that conversion approaches for GD children have already been rejected by medical consensus, citing five sources. This claim struck me as just as odd, however—I recalled associations banning conversion therapy for sexual orientation, but not for gender identity, exactly because there is no evidence for generalizing from adult sexual orientation to childhood gender identity. So, I started checking AAP’s citations for that, and these sources too pertained only to sexual orientation, not gender identity (specifics below). What AAP’s sources *did* repeatedly emphasize was that:

- A. Sexual orientation of adults is unaffected by conversion therapy and any other [known] intervention;
- B. Gender dysphoria in childhood before puberty desists in the majority of cases, becoming (cis-gendered) homosexuality in adulthood, again regardless of any [known] intervention; and
- C. Gender dysphoria in childhood persisting after puberty tends to persist entirely.

That is, in the context of GD children, it simply makes no sense to refer to externally induced “conversion”: The majority of children “convert” to cisgender or “desist” from transgender

regardless of any attempt to change them. “Conversion” only makes sense with regard to adult sexual orientation because (unlike childhood gender identity), adult homosexuality never or nearly never spontaneously changes to heterosexuality. Although gender identity and sexual orientation may often be analogous and discussed together with regard to social or political values and to civil rights, they are nonetheless distinct—with distinct origins, needs, and responses to medical and mental health care choices. Although AAP emphasized to the reader that “gender identity is not synonymous with ‘sexual orientation’” (Rafferty et al., 2018, p. 3), they went ahead to treat them as such nonetheless.

To return to checking AAP’s fidelity to its sources: Reference 29 was a practice guideline from the Committee on Quality Issues of the American Academy of Child and Adolescent Psychiatry (AACAP). Despite AAP applying this source to *gender identity*, AACAP was quite unambiguous regarding their intent to speak to sexual orientation and *only* to sexual orientation: “Principle 6. Clinicians should be aware that there is no evidence that *sexual orientation* can be altered through therapy, and that attempts to do so may be harmful. There is no established evidence that change in a predominant, enduring *homosexual* pattern of development is possible. Although sexual fantasies can, to some degree, be suppressed or repressed by those who are ashamed of or in conflict about them, sexual desire is not a choice. However, behavior, social role, and—to a degree—identity and self-acceptance are. Although operant conditioning modifies sexual fetishes, it does not alter *homosexuality*. Psychiatric efforts to alter *sexual orientation* through ‘reparative therapy’ in adults have found little or no change in *sexual orientation*, while causing significant risk of harm to self-esteem” (AACAP, 2012, p. 967, italics added).

Whereas AAP cites AACAP to support gender affirmation as the only alternative for treating GD children, AACAP’s actual view was decidedly neutral, noting the lack of evidence: “Given the lack of empirical evidence from randomized, controlled trials of the efficacy of treatment aimed at eliminating gender discordance, the potential risks of treatment, and longitudinal evidence that gender discordance persists in only a small minority of untreated cases arising in childhood, further research is needed on predictors of persistence and desistence of childhood gender discordance as well as the long-term risks and benefits of intervention before any treatment to eliminate gender discordance can be endorsed” (AACAP, 2012, p. 969). Moreover, whereas AAP rejected watchful waiting, what AACAP recommended was: “In general, it is desirable to help adolescents who may be experiencing gender distress and dysphoria to defer sex reassignment until adulthood” (AACAP, 2012, p. 969). So, not only did AAP attribute to AACAP something AACAP never said, but also AAP withheld from readers AACAP’s actual view.

Next, in reference 39, Byne (2016) also addressed only sexual orientation, doing so very clearly: “Reparative therapy is a subset of conversion therapies based on the premise that *same-sex attraction* are reparations for childhood trauma. Thus, practitioners of reparative therapy believe that exploring, isolating, and repairing these childhood emotional wounds will often result in reducing *same-sex attractions*” (Byne, 2016, p. 97). Byne does not say this of gender identity, as the AAP statement misrepresents.

In AAP reference 40, Cohen-Kettenis et al. (2008) did finally pertain to gender identity; however, this article never mentions conversion therapy. (!) Rather, in this study, the authors presented that clinic’s lowering of their minimum age for cross-sex hormone treatment from age 18 to 16, which they did on the basis of a series of studies showing the high rates of success with this age group. Although it did strike me as odd that AAP picked as support against conversion therapy an article that did not mention conversion therapy, I could imagine AAP cited the article as an example of what the “mainstream of traditional medical practice” consists of (the logic being that conversion therapy falls outside what an ‘ideal’ clinic like this one provides). However, what this clinic provides is the very *watchful waiting* approach that AAP rejected. The approach

espoused by Cohen-Kettenis (and the other clinics mentioned in the source—Gent, Boston, Oslo, and now formerly, Toronto) is to make puberty-halting interventions available at age 12 because: “[P]ubertal suppression may give adolescents, together with the attending health professional, more time to explore their gender identity, without the distress of the developing secondary sex characteristics. The precision of the diagnosis may thus be improved” (Cohen-Kettenis et al., 2008, p. 1894).

Reference 41 presented a very interesting history spanning the 1960s–1990s about how feminine boys and tomboyish girls came to be recognized as mostly pre-homosexual, and how that status came to be entered into the DSM at the same time as homosexuality was being *removed* from the DSM. Conversion therapy is never mentioned. Indeed, to the extent that Bryant mentions treatment at all, it is to say that treatment is entirely irrelevant to his analysis: “An important omission from the *DSM* is a discussion of the kinds of treatment that GIDC children should receive. (This omission is a general orientation of the *DSM* and not unique to GIDC)” (Bryant, 2006, p. 35). How this article supports AAP’s claim is a mystery. Moreover, how AAP could cite a 2006 history discussing events of the 1990s and earlier to support a claim about the *current* consensus in this quickly evolving discussion remains all the more unfathomable.

Cited last in this section was a one-paragraph press release from the World Professional Association for Transgender Health. Written during the early stages of the American Psychiatric Association’s (APA’s) update of the *DSM*, the statement asserted simply that “The WPATH Board of Directors strongly urges the de-psychopathologisation of gender variance worldwide.” Very reasonable debate can (and should) be had regarding whether gender dysphoria should be removed from the *DSM* as homosexuality was, and WPATH was well within its purview to assert that it should. Now that the *DSM* revision process is years completed however, history has seen that APA ultimately retained the diagnostic categories, rejecting WPATH’s urging. This makes AAP’s logic entirely backwards: That WPATH’s request to depathologize gender dysphoria was *rejected* suggests that it is WPATH’s view—and therefore the AAP policy—which fall “outside the mainstream of traditional medical practice.” (!)

AAP based this entire line of reasoning on their belief that conversion therapy is being used “to prevent children and adolescents from identifying as transgender” (Rafferty et al., 2018, p. 4). That claim is left without citation or support. In contrast, what is said by AAP’s sources is “delaying affirmation should *not* be construed as conversion therapy or an attempt to change gender identity” in the first place (Byne, 2016, p. 2). Nonetheless, AAP seems to be doing exactly that: simply relabeling any alternative approach as equivalent to conversion therapy.

Although AAP (and anyone else) may reject (what they label to be) conversion therapy purely on the basis of political or personal values, there is no evidence to back the AAP’s stated claim about the existing science on gender identity at all, never mind gender identity of children.

AAP also dismissed the watchful waiting approach out of hand, not citing any evidence, but repeatedly calling it “outdated.” The criticisms AAP provided, however, again defied the existing evidence, with even its own sources repeatedly calling watchful waiting the current standard. According to AAP:

[G]ender affirmation is in contrast to the outdated approach in which a child’s gender-diverse assertions are held as “possibly true” until an arbitrary age (often after pubertal onset) when they can be considered valid, an approach that authors of the literature have termed “watchful waiting.” This outdated approach does not serve the child because critical support is withheld. Watchful waiting is based on binary notions of gender in which gender diversity and fluidity is pathologized; in watchful waiting, it is also assumed that notions of gender identity become fixed at a certain age. The approach is also influenced by a group of early studies with validity concerns, methodologic flaws, and limited follow-up on children who identified as TGD and, by adolescence, did not seek further treatment (“desisters”).^{45,47}

The citations from AAP’s reference list are:

45. Ehrensaft D, Giammattei SV, Storck K, Tishelman AC, Keo-Meier C. Prepubertal social gender transitions: what we know; what we can learn—a view from a gender affirmative lens. *Int J Transgend*. 2018;19(2):251–268
47. Olson KR. Prepubescent transgender children: what we do and do not know. *J Am Acad Child Adolesc Psychiatry*. 2016;55(3):155–156.e3

I was surprised first by the AAP's claim that watchful waiting's delay to puberty was somehow "arbitrary." The literature, including AAP's sources, repeatedly indicated the pivotal importance of puberty, noting that outcomes strongly diverge at that point. According to AAP reference 29, in "*prepubertal* boys with gender discordance—including many without any mental health treatment—the cross gender wishes usually fade over time and do not persist into adulthood, with only 2.2% to 11.9% continuing to experience gender discordance" (Adelson & AACAP, 2012, p. 963, italics added), whereas "when gender variance with the desire to be the other sex is present *in adolescence*, this desire usually does persist through adulthood" (Adelson & AACAP, 2012, p. 964, italics added). Similarly, according to AAP reference 40, "Symptoms of GID *at prepubertal ages* decrease or even disappear in a considerable percentage of children (estimates range from 80–95%). Therefore, any intervention in childhood would seem premature and inappropriate. However, GID persisting *into early puberty* appears to be highly persistent" (Cohen-Kettenis et al., 2008, p. 1895, italics added). That follow-up studies of prepubertal transition differ from postpubertal transition is the very meaning of non-arbitrary. AAP gave readers exactly the reverse of what was contained in its own sources. If AAP were correct in saying that puberty is an arbitrarily selected age, then AAP will be able to offer another point to wait for with as much empirical backing as puberty has.

Next, it was not clear on what basis AAP could say that watchful waiting withholds support—AAP cited no support for its claim. The people in such programs often receive substantial support during this period. Also unclear is on what basis AAP could already know exactly which treatments are "critical" and which are not—Answering that question is the very purpose of this entire endeavor. Indeed, the logic of AAP's claim appears entirely circular: It is only if one were already pre-convinced that gender affirmation is the only acceptable alternative that would make watchful waiting seem to withhold critical support—What it delays is gender affirmation, the method one has already decided to be critical.

Although AAP's next claim did not have a citation appearing at the end of its sentence, binary notions of gender were mentioned both in references 45 and 47. Specifically, both pointed out that existing outcome studies have been about people transitioning from one sex to the other, rather than from one sex to an in-between status or a combination of masculine/feminine features. Neither reference presented this as a reason to reject the results from the existing studies of complete transition however (which is how AAP cast it). Although it is indeed true that the outcome data have been about complete transition, some future study showing that partial transition shows a different outcome would not invalidate what is known about complete transition. Indeed, data showing that partial transition gives better outcomes than complete transition would, once again, support the watchful waiting approach which AAP rejected.

Next was a vague reference alleging concerns and criticisms about early studies. Had AAP indicated what those alleged concerns and flaws were (or which studies they were), then it would be possible to evaluate or address them. Nonetheless, the argument is a red herring: Because all of the later studies showed the same result as did the early studies, any such allegation is necessarily moot.

Reference 47 was a one-and-a-half page commentary in which the author off-handedly mentions criticisms previously made of three of the eleven outcome studies of GD children, but does not provide any analysis or discussion. The only specific claim was that studies (whether early or late) had limited follow-up periods—the logic being that had outcome researchers lengthened the follow-up period, then people who seemed to have desisted might have returned to the clinic as

cases of “persistence-after-interruption.” Although one could debate the merits of that prediction, AAP instead simply withheld from the reader the result from the original researchers having tested that very prediction directly: Steensma and Cohen-Kettenis (2015) conducted another analysis of their cohort, by then ages 19–28 (mean age 25.9 years), and found that 3.3% (5 people of the sample of 150) later returned. That is, in long-term follow-up, the childhood sample showed 66.7% desistence instead of 70.0% desistance.

Reference 45 did not support the claim that watchful-waiting is “outdated” either. Indeed, that source said the very opposite, explicitly referring to watchful waiting as the *current* approach: “Put another way, if clinicians are straying from SOC 7 guidelines for social transitions, not abiding by the watchful waiting model *avored by the standards*, we will have adolescents who have been consistently living in their affirmed gender since age 3, 4, or 5” (Ehrensaft et al., 2018, p. 255). Moreover, Ehrensaft et al. said there are cases in which they too would still use watchful waiting: “When a child’s gender identity is unclear, the watchful waiting approach can give the child and their family time to develop a clearer understanding and is not necessarily in contrast to the needs of the child” (p. 259). Ehrensaft et al. are indeed critical of the watchful waiting model (which they feel is applied too conservatively), but they do not come close to the position the AAP policy espouses. Where Ehrensaft summarizes the potential benefits and potential risks both to transitioning and not transitioning, the AAP presents an ironically binary narrative.

In its policy statement, AAP told neither the truth nor the whole truth, committing sins both of commission and of omission, asserting claims easily falsified by anyone caring to do any fact-checking at all. AAP claimed, “This policy statement is focused specifically on children and youth that identify as TGD rather than the larger LGBTQ population”; however, much of that evidence was about sexual orientation, not gender identity. AAP claimed, “Current available research and expert opinion from clinical and research leaders ... will serve as the basis for recommendations” (pp. 1–2); however, they provided recommendations entirely unsupported and even in direct opposition to that research and opinion.

AAP is advocating for something far in excess of mainstream practice and medical consensus. In the presence of compelling evidence, that is just what is called for. The problems with Rafferty, however, do not constitute merely a misquote, a misinterpretation of an ambiguous statement, or a missing reference or two. Rather, AAP’s statement is a systematic exclusion and misrepresentation of entire literatures. Not only did AAP fail to provide compelling evidence, it failed to provide the evidence at all. Indeed, AAP’s recommendations are *despite* the existing evidence.

Disclosure statement

No potential conflict of interest was reported by the author.

References

- Rafferty, J., AAP Committee on Psychosocial Aspects of Child and Family Health, AAP Committee on Adolescence, AAP Section on Lesbian, Gay, Bisexual, and Transgender Health and Wellness. (2018). Ensuring comprehensive care and support for transgender and gender-diverse children and adolescents. *Pediatrics*, 142(4), e20182162 doi:10.1542/peds.2018-2162
- Steensma, T. D., & Cohen-Kettenis, P. T. (2015). More than two developmental pathways in children with gender dysphoria? *Journal of the American Academy of Child and Adolescent Psychiatry*, 52, 147–148. doi:10.1016/j.jaac.2014.10.016
- Wallien, M. S. C., & Cohen-Kettenis, P. T. (2008). Psychosexual outcome of gender-dysphoric children. *Journal of the American Academy of Child and Adolescent Psychiatry*, 47, 1413–1423. doi:10.1097/CHI.0b013e31818956b9

Appendix

Count	Group	Study
2/16	gay*	Lebovitz, P. S. (1972). Feminine behavior in boys: Aspects of its outcome. <i>American Journal of Psychiatry</i> , 128, 1283–1289.
4/16	trans-/crossdress	
10/16	straight*/uncertain	
2/16	trans-	Zuger, B. (1978). Effeminate behavior present in boys from childhood: Ten additional years of follow-up. <i>Comprehensive Psychiatry</i> , 19, 363–369.
2/16	uncertain	
12/16	gay	
0/9	trans-	Money, J., & Russo, A. J. (1979). Homosexual outcome of discordant gender identity/role: Longitudinal follow-up. <i>Journal of Pediatric Psychology</i> , 4, 29–41.
9/9	gay	
2/45	trans-/crossdress	Zuger, B. (1984). Early effeminate behavior in boys: Outcome and significance for homosexuality. <i>Journal of Nervous and Mental Disease</i> , 172, 90–97.
10/45	uncertain	
33/45	gay	
1/10	trans-	Davenport, C. W. (1986). A follow-up study of 10 feminine boys. <i>Archives of Sexual Behavior</i> , 15, 511–517.
2/10	gay	
3/10	uncertain	
4/10	straight	
1/44	trans-	Green, R. (1987). <i>The "sissy boy syndrome" and the development of homosexuality</i> . New Haven, CT: Yale University Press.
43/44	cis-	
0/8	trans-	Kosky, R. J. (1987). Gender-disordered children: Does inpatient treatment help? <i>Medical Journal of Australia</i> , 146, 565–569.
8/8	cis-	
21/54	trans-	Wallien, M. S. C., & Cohen-Kettenis, P. T. (2008). Psychosexual outcome of gender-dysphoric children. <i>Journal of the American Academy of Child and Adolescent Psychiatry</i> , 47, 1413–1423.
33/54	cis-	
3/25	trans-	Drummond, K. D., Bradley, S. J., Badali-Peterson, M., & Zucker, K. J. (2008). A follow-up study of girls with gender identity disorder. <i>Developmental Psychology</i> , 44, 34–45.
6/25	lesbian/bi-	
16/25	straight	
17/139	trans-	Singh, D. (2012). <i>A follow-up study of boys with gender identity disorder</i> . Unpublished doctoral dissertation, University of Toronto.
122/139	cis-	
47/127	trans-	Steensma, T. D., McGuire, J. K., Kreukels, B. P. C., Beekman, A. J., & Cohen-Kettenis, P. T. (2013). Factors associated with desistence and persistence of childhood gender dysphoria: A quantitative follow-up study. <i>Journal of the American Academy of Child and Adolescent Psychiatry</i> , 52, 582–590.
80/127	cis-	

*For brevity, the list uses "gay" for "gay and cis-", "straight" for "straight and cis-", etc.